CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, February 4, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(denotes that this work is advertised in Engineering News.)*

The following plans (P.) and Specifications (S.) are on file and may be seen at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
2- 5	*Condenser, etc., Key West, Fla. (S.)	1- 7
2- 8	*Wire fence, Prescott, Ariz. (P. & S.)	1- 7
2- 8	Sewers, College Hill, Ohio (P. & S.)	1-14
2-11	*Sewer extension, Brantford, Ont. (S.)	1-28
3- 1	*Power plant, Lethbridge, Alta. (S.)	1-21

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

2- 5	Boilers, Saskatoon, Sask.	1-21
2- 5	Lighting, St. Louis, Mo.	1- 7
2- 8	Elec. equip., Columbus Barracks, Ohio	1-21
2-10	Power-house, etc., National Soldiers' Home, Va.	1-21
2-10	Lighting, etc., New York	1-28
2-10	Light plant, Terrell, Tex.	2- 4
2-15	Elec. equip., Yukon, Okla.	1-21
2-17	Light plant, Chicago, Ill.	1-21
2-17	*Light plant, Milwaukee, Wis.	1-28
2-17	Lighting, heating, etc., Richmond, Ky	1-28
2-18	Power equipment, Calgary, Alta.	1-28
3- 1	*Power plant, Lethbridge, Alta.	1-21
3- 2	Wiring, etc., Atlanta, Ga.	2- 4
3-22	Elec. supplies, Wash., D. C.	2- 4

BRIDGES.

2- 5	Bridge, Cincinnati, Ohio	1-14
2- 6	Bridge repair, Richmond, Ind.	1-28
2- 6	Bridges, Mena, Ark.	1-28
2- 6	Bridge, Hochheim, Tex.	2- 4
2- 8	Bridge repair, Minneapolis, Minn.	2- 4
2- 9	Bridge repair, Annapolis, Md.	2- 4
2- 9	Bridge, Lawton, Okla.	1-21
2-10	Bridge, Fort Des Moines, Iowa	1-28
2-12	Bridges, Grand Fork, N. Dak.	2- 4
2-15	Abutments, East Palestine, O.	2- 4
2-15	Abutments, Norwalk, Ohio	2- 4
2-15	Viaduct, Lynchburg, Va.	2- 4
2-16	Bridges, Waseca, Minn.	2- 4
2-20	Bridge work, Cleveland, Ohio	1-28
3- 4	Bridges, Paris, Ark.	12-17
3- 3	Bridge work, Cleveland, Ohio	2- 4
4- 5	Bridge, etc., Harrisonburg, La.	2- 4

BUILDINGS.

2- 5	Quarters, Ft. Barrancas, Fla.	1-28
2- 5	Jail, Montreal, Que.	1-28
2- 6	Building, Reading, Ohio	2- 4
2- 8	Post-office, Clarinda, Ia.	1- 7
2- 9	Stable, Ft. Myer, Va.	1-21
2- 9	Plans, etc., Weatherford, Pa.	1-28
2-10	*Quarters, New London, Conn.	1-21
2-10	Bank, Philadelphia, Pa.	1-21
2-11	School, Dulce, N. Mex.	1-28
2-12	Library, Cleveland, Ohio	1-28
2-15	Post-office, Shenandoah, Iowa	1-14
2-15	School, Grand Rapids, Mich.	1-14
2-15	*Quarters, Ft. Dupont, Del.	1-21
2-15	*Quarters, Fort Monroe, Va.	1-21
2-15	Hospital, Patton, Cal.	2- 4
2-15	Building, Peoria, Ill.	2- 4
2-15	Jail equip., Plymouth, Mass.	2- 4
2-16	School, San Bernardino, Cal.	2- 4
2-16	Post-office alterations, Wheeling, W. Va.	2- 4
2-16	*Coping, Washington, D. C.	1-14
2-16	Jail, Youngstown, Ohio	2- 4
2-17	*Post-office, Salisbury, N. C.	1-14
2-18	*Post-office, Greenville, Miss.	1-21
2-18	Court-house, Newton, Iowa	1-28
2-20	Post-office, Bar Harbor, Me.	1-21
2-20	Plans, Port Arthur, Ont.	1-28
2-20	Plans, etc., Woodstock, Ont.	2- 4
2-23	Sale of buildings, Los Angeles, Cal.	2- 4
2-23	Buildings, Los Angeles, Cal.	2- 4
2-23	Building, Abilene, Tex.	2- 4
2-23	Building, Dodge City, Kan.	2- 4
2-23	Post-office, Roanoke, Va.	1-21
2-25	Ward, Hot Springs, S. Dak.	2- 4
3- 1	*Coal shed, Tiburon, Cal.	2- 4
3- 1	Post-office, Gadsden, Ala.	2- 4
3- 1	Machinery, Maxton, N. C. (Mfg. Pl.)	1-21
3- 3	Post-office, etc., Augusta, Me.	1-28
3- 8	Heating, ventilating, Atlanta, Ga.	2- 4

WATER-WORKS.

2- 5	*Condenser, Key West, Fla.	1- 7
2- 6	Pump, Lorain, Ohio	1-28
2- 6	*Water plant, Saltsburg, Pa.	1-28
2- 8	Reservoir embankment, Granite, Colo.	2- 4
2- 8	Water-works, Edgemont, S. Dak.	1-28
2- 9	*Pumping station addition, Beaver, Pa.	2- 4
2-10	Pumping engine, Phoenix, Ariz.	1-28
2-12	Cast-iron pipe, Cincinnati, O.	2- 4
2-15	*Water-works, Haskell, Tex.	2- 4
2-15	Water-works, Itta Bena, Miss.	2- 4
2-15	Reservoir, New Ulm, Minn.	1-21
2-15	Water-works, Sebree, Ky.	1-21
2-17	Water supply, Elkhart, Ind.	2- 4
2-20	*W.-Wks., Webster, N. Y.	1-28
2-22	*Pump, Winnipeg, Man.	12- 3
2-24	*Pumping engine, Saskatoon, Sask.	2- 4
3- 1	*Filtration plant, Rock Island, Ill.	2- 4
3-15	Water-works, Wichita, Kan.	1-21

SEWERS.

2- 3	Sewer, etc., Long Island City, N. Y	1-28
2- 3	Tanks and tower, Baltimore, Md.	1-28
2- 3	Sewers, Brooklyn, N. Y.	1-21
2- 4	Sewer, Wilson, Pa.	1-28
2- 5	*Sewers, Louisville, Ky.	1-28
2- 5	Sewer pipe, etc., Banff, Alta.	1-14
2- 8	Sewers, College Hill, Ohio	1-14
2- 9	*Sewer extension, Niagara Falls, N. Y	1-28
2- 9	Sewer mains, Graymont, Ala.	2- 4
2-10	Sewer system, Detroit, Minn.	1-28
2-10	Sewers, Brooklyn, N. Y.	1-28
2-11	*Sewer pipe, Brantford, Ont.	1-28
2-12	Sewer brick, etc., Minneapolis, Minn.	2- 4
2-12	Sewers, St. Joseph, Mo.	2- 4
2-15	Sewer system, Santa Cruz, Cal.	1-28
2-15	Sewer, Great Falls, Mont.	1- 7
2-15	Sewers, etc., Atlanta, Ga.	2- 4
2-16	Sewers, Ashtabula, Ohio	2- 4
2-17	Sewers, etc., East St. Louis, Ill.	1-21
2-17	*Sewers, Baltimore, Md.	1-28
2-20	Sewer, Denton, Tex.	2- 4
3- 2	Sewer, Newburgh, N. Y.	1-28
3- 8	Sewer, Grundy Center, Iowa	1- 7

STREETS AND ROADS.

2- 5	Paving, St. Louis, Mo.	1-21
2- 5	Road, Anderson, Ind.	1-28
2- 5	Road, Lebanon, Ind.	1-28
2- 5	Road impvt., Cincinnati, Ohio	1-28
2- 5	Sidewalks, Winchester, Ont.	2- 4
2- 5	Paving, etc., Pittsburg, Pa.	2- 4
2- 6	Limestone, etc., Barnesville, O.	2- 4
2- 6	Roads, Terre Haute, Ind.	1-28
2- 8	Road, Franklin, Ind.	1-28
2- 8	Paving, Indianola, Iowa	1-28
2- 8	Maintaining asphalt, New York	1-28
2- 8	Pavement, Atlantic City, N. J.	2- 4
2- 9	Paving, Pasadena, Cal	2- 4
2- 9	Repaving, etc., Toledo, Ohio	2- 4
2-10	Highway impvt., Elkton, Md.	2- 4
2-10	Brick, asphalt tile, Baltimore, Md.	2- 4
2-10	Paving, Fond du Lac, Wis.	1-21
2-12	Road, Fowler, Ind.	1- 7
2-12	Roads, Lafayette, Ind.	1-28
2-12	Paving blocks, etc., Minneapolis, Minn.	2- 4
2-12	Grand stand, Ottawa, Ont.	2- 4
2-15	Street impvt., St. Paul, Minn.	1-28
2-15	Pavement, Paris, Ill.	1-28
2-15	*Concrete walks, Whipple Barracks, Ariz.	1-21
2-15	Macadam, Upland, Cal.	2- 4
2-15	Paving blocks, Savannah, Ga.	2- 4
2-16	Road repair, Milford, Ohio	1-28
2-17	Road impvt., St. Bernard, Ohio	1-28
2-17	Regulating, etc., Brooklyn, N. Y.	2- 4
2-17	Grading, etc., Cleveland, Ohio	2- 4
2-18	Road, Greenfield, Ind.	1-28
2-18	Street impvt., Oakwood, Ohio	1-28
2-18	*Paving, etc., Greenwood, S. C.	1-28
2-18	Road, Spencer, Ind.	1-14
2-20	Sidewalks, Lake Village, Ark.	2- 4
2-25	Concrete walks, Ft. William, Me.	2- 4
3- 1	Pavement, etc., Oxford, Miss.	2- 4
3- 2	Roads, Bloomfield, Ind.	1-28
3- 4	Road, Wabash, Ind.	2- 4
3- 4	*Paving, Corning, N. Y.	2- 4

MISCELLANEOUS.

2- 5	Tile, etc., Girard, Ill.	1-28
2- 6	*Removing wrecks, Boston, Mass.	1-14
2- 6	*Ditches, levees, Atkinson, Ill.	1-14
2- 8	*Fence, Prescott, Ariz.	1- 7
2- 8	Supplies, Panama	1-21
2- 9	Broken stone, New York	1-21
2- 9	Ponton wagons, Wash., D. C.	1-21
2- 9	Supplies, Wash., D. C.	1-28
2- 9	Fire alarm system, Butler, Pa.	2- 4
2-10	Engine, Wash., D. C.	2- 4
2-10	Railway, Gilmore & Pittsburg	1-28
2-10	Sale of steamer, Wash., D. C.	1-21
2-10	Ditch, Logan, Ia.	1- 7
2-11	Wooden pontoons, Mobile, Ala.	1-21
2-12	*Pier, dredging, Milwaukee, Wis.	1-21
2-12	Cement, Minneapolis, Minn.	2- 4
2-12	Grand stand, Ottawa, Ont.	2- 4
2-13	Drydock, Hawaii	12-17
2-15	Piles, Superior, Wis.	2- 4
2-15	Tile drain, Jefferson, Iowa	1-28
2-15	Monument, Indianapolis, Ind.	1-14
2-16	*Repairing pier, Frankfort, Mich.	1-21
2-16	Tile drain, Jefferson, Iowa	1-28
2-18	Fences, Fort Barrancas, Fla.	1-28
2-18	Electric Railway materials, Calgary, Alta.	2- 4
2-25	Pier, San Francisco, Cal.	2- 4
3-17	Timber cruiser, Wash., D. C.	2- 4

CIVIL SERVICE.

2-17	Engr., Fort Berthold, N. D.	1-21
2-24	Scientific Asst., Wash., D. C.	1-21
2-24	Laboratory aid, Columbia, Mo.	1-21
2-24	Topographic aid, Washington, D. C	1-28
2-24	Junior chemist, Washington, D. C	1-28
2-24	Computer, Washington, D. C.	1-28
2-24	Asst. bacteriologist, Washington, D. C.	1-28
2-24	Examiner, Ore. Wash.	2- 4
2-27	Supt. Highways, Albany, N. Y.	2- 4
2-27	Resident Engr., Albany, N. Y.	2- 4
3- 3	Chemical Biologist, Wash., D. C.	2- 4
3-17	Practical Miner, Wash., D. C.	2- 4
3-17	Aid in Zoology, Wash., D. C.	2- 4

RAILWAYS.

ALBERTA SOUTHWESTERN.—Application for two important railway charters in the southern part of Alberta Province have been presented to the Legislature. John Marcells, member for Pincher, presented a petition for the incorporation of the Southwest Alberta Railway Co., which is to run due southeast from Pincher Creek to the international border line. The distance will be about 54 miles. Malcolm McKenzie, member for McLeod, presented a petition on behalf of Darcy Tate, solicitor for the Grand Trunk Pacific, for an act to incorporate the Alberta Southwestern Railway Co., with power to operate and maintain a line of railway from a point on the line of the Grand Trunk Pacific branch line between Calgary and Lethbridge, such point being in a northeasterly direction from McLeod, thence to, or near, McLeod, and westerly from a point at, or near, MacLeod, to or in the vicinity of Pincher Creek, thence in a westward direction to the western boundary of the province, a distance of about 100 miles.

ALTUS, ROSWELL & EL PASO.—Construction probably will be started this month on this railway. Funds are available to push the construction work. The line will run from Altus, Okla., on the Kansas City, Mexico & Orient, west to Hollis and eventually to Roswell, N. Mex., a total of 286 miles. Grading has been finished in Oklahoma on 33 miles and on 22 miles near Lubbock, Tex. Edward Kennedy is Pres. and H. Fielder, Ch. Engr., Altus, Okla.

ARKANSAS ZINC BELT.—Chartered in Arkansas, with $1,500,000 capital, to build a line 30 miles long from the mouth of Big Creek via Yellville to Stone, Ark., in Marion County. Incorporators are W. H. Gone, W. L. Johnson and Henry A. Allen, of Chicago; H. Wells, R. L. Berry, W. E. Layton, E. B. Griswold and A. W. Estes, of Yellville, Ark., and Frank Pace, of Little Rock, Ark. Work is to begin immediately.

BUFFALO CONNECTING RY.—Application was formally made on Feb. 1 to the Public Service Commission, Second District, by the Buffalo Connecting Ry. Co. for authority to build a steam belt freight line around Buffalo, taking in several towns in Erie County. The company has a capital of $4,000,000 and is the successor of the Niagara Transfer Railway Co. and the Buffalo, Lake Erie & Niagara Ry. Co. Counsel for the company requested an early hearing. The proposed road is opposed by the Frontier Terminal Railway Co., which desires to build over practically the same territory. The dispute is now before the Appellate Division, Fourth Department, the Frontier Terminal Railway Co. having applied for an order directing the Public Service Commission to issue to it a certificate of authority to build its road. Authority to build the road was granted by the former State Board of Railroad Commissioners some time ago to the Niagara Transfer Railway Co. and the Buffalo, Lake Erie & Niagara Railway Co., but these decisions were set aside by the Appellate Division, Third Department. Because of the pending litigation the commission may not hear the new application until the courts have passed on the action begun by the Frontier Terminal Railway Co. Noted on Jan. 7.

CABANO RAILWAY.—Incorporation has been asked for by this company from the Canadian Parliament to build a line from a point at Long Lake, Que., on the Grand Trunk Pacific (National Transcontinental) thence easterly following the valley of the Cabano River to Cabano, on Lake Temeiscouata. A. Fraser, Cabano, Que., is Solicitor for the company.

CANADA.—The Government has under consideration a bill to aid railway development in the Province of Saskatchewan. It provides for assistance to about 700 miles of branch lines of the Canadian Northern and Grand Trunk Pacific, under a guarantee of bonds to the extent of $13,000 per mile. The lines referred to are as follows: (1) From a point on the western division on the G. T. P. to Yorkton, a distance of about 40 miles. (2) On the western division of the G. T. P., between the 108th and 100th degrees of longitude, to Battleford, a distance of 40 miles. (3) From the vicinity of township 22, range six, on the western division of the G. T. P., to Regina, a distance of about 110 miles. This will give a direct line from Regina to Yorkton, via Melville.

Six lines of the Canadian Northern are to receive assistance, or about 500 miles in all. They are as follows: (1) A line from Craven, running west of Lost Mountain Lake, to a point on the Prince Albert branch. (2) A line between Aylesbury and Davidson, northwesterly and westerly, to a junction with the Goose Lake branch of the C. N. R., about 100 miles. (3) A line to Roche Percee coal fields, 25 miles. (4) Maryfield, westerly and northwesterly for 135 miles. (5) A line from Dalmeny, on the main line of the C. N. R., north and northwesterly for 40 miles. (6) A line from North Battleford, northerly for 40 miles.

CANADIAN NORTHERN.—Hugh Sutherland, Executive Agt., Winnipeg, Man., is reported to have stated that this company is considering the construction of a line from North Portal, Sask., on the boundary between Saskatchewan and North Dakota in a northeasterly direction to Errwood, Sask., to connect with the company's Hudson Bay line.

See under "Canada."

CHICAGO, ROCK ISLAND & PACIFIC.—Construction work on the cut-off from Amarillo, Tex., to Tucumcari, N. Mex., will be resumed in the spring. The entire line to Tucumcari may be finished during the coming season. The line is now built to Eldorado, 21 miles west of Amarillo. The distance from Eldorado to Tucumcari, which it is hoped to cover this year, is 90 miles. The completion of the Amarillo-Tucumcari line will give the Rock Island-Frisco System, via Oklahoma City, the shortest line from St. Louis to Tucumcari and also a direct and the shortest line from Memphis to Tucumcari. The Tucumcari-Memphis Railway Co. has been incorporated. This company is a subsidiary corporation of the Rock Island System and will complete the Choctaw extension to Tucumcari, abandoned two years ago. The headquarters are Chicago, and the capital stock $1,500,000. The incorporators and directors are B. L. Winchell, E. C. Lindley, George H. Crosby, M. L. Bell and S. T. Fulton.

COBALT RANGE RY.—Application will be made by this company to the Canadian Parliament for an extension of time to build lines already authorized and in addition to build an extension in a westerly direction from Haileybury, Ont., via Bucke, Firstbrook Barr, or Hudson, Lundy, Auld, Cane or Henwood, Barber, Tudhope or Bryce and James in the Nipissing district, to Elk Lake, and thence by way of Smyth and unsurveyed portions of the Nipissing district to Gowganda Lake; from its proposed line from Ville Marie to Opasitica Lake, thence northerly to the Grand Trunk Pacific (National Transcontinental) MacCracken, Henderson, McDougal & Green, of Ottawa, Ont., are Solicitors for the company.

GRAND TRUNK PACIFIC.—See under "Canada."

MEXICO.—The Yaqui Land & Water Co. has been incorporated in Trenton, N. J., with an authorized capital stock of $15,000,000, of which $5,000,000 is to be preferred stock. One of the objects specified in the charter is to contruct a railroad from a point on the Gulf of California in Mexico to some place in either State of Sonora or Chihuahua. In conjunction with this the company proposes to construct a telegraph line and to develop parts of the country by irrigation and other means. The incorporators are E. L. Gruber, Thomas J. Regan, C. W. Davis, F. R. Burnham, R. D. Hanna, Ralph B. Crummy and John R. Turner.

MISSOURI RIVER & CAMERON.—Incorporated in Missouri to build a line 35 miles long from the Missouri River, in Platte County, via Smithville to Lathrop, Mo. Capital, $350,000. The incorporators are William W. Lewis, Charles O. French, William A. Medill, Fred M. Tigus and U. S. Grant Peabody, all of Kansas City, Mo.

NORTH MIDLAND RY.—Company has announced that surveys for this road have been completed. It is expected that construction will begin this spring. The line will connect Lucan, Granton, St. Marys, Stratford and London, Ont. It will be about 45 miles in length. Capital, $1,000,000. T. H. Lascombe, London, Secy.; A. E. Welch, London, Ont., Gen. Mgr.

OKLAHOMA & GOLDEN CITY.—Company will build its first section from Golden City, Mo., northeast to Stockton, and from Golden City southeast to Carthage. When this is completed, work will begin from Pawhuska, Okla., to the northeast and from Jefferson City to the southwest, also continuing work on the lines in both directions from Golden City. Upon the completion of these lines work will be begun on the branch from Climax Springs, Mo., south to Springfield. Contracts for grading, track laying, etc., will be let in April. There will be five large bridges and a number of smaller ones, also some trestle work. W. S. Pope, Pres., Jefferson City; J. A. Griesel, Gen. Mgr., Golden City; E. M. Dempsey, Vice-Pres., and W. S. Hawkins, Ch. Engr., Pawhuska, Okla. This company, previously noted, was incorporated in Oklahoma with a capital of $12,000,000 to build a line from Pawhuska, Okla., northeast through Bartlesville, Miami, Joplin, Mo., Carthage, Golden City, Stockton, Humansville, Climax Springs and Brazito to Jefferson City; also a branch from Climax Springs, Mo., south to Springfield.

PRINCE ALBERT & HUDSON BAY.—Application has been made to the Canadian Parliament for incorporation by this company to build a line from Prince Albert, Sask., crossing the Saskatchewan River and northeasterly to the mouth of Nelson River or York Factory on Hudson Bay; also for permission to operate vessels on all navigable waters touched by the railway. F. W. Halliday, Prince Albert, Sask., is Solicitor for the company.

QUEBEC & ORIENTAL.—Application has been made by this company to the Canadian Parliament for an extension of time to build a line from Riviere du Loup, Que., southeasterly through Temiscouata County, to a connection with the Grand Trunk Pacific (National Transcontinental) in either Temiscouata or Kamouraska Counties, and to buy railway lines from Metapedia east to Caplin, and from Caplin to Paspebiac. Known as the Baie des Chaleurs section of the Atlantic & Lake Superior Railway; also for authority to increase its bonding powers to $45,000 a mile. D. R. Murphy, Montreal, Que., is Solicitor for the company.

SASKATCHEWAN CENTRAL.—Application is being made to the Saskatchewan Legislature by W. M. Martin, R. H. Williams, A. B. Casey and others, of Regina, Sask., for a charter. Since the first notice of application was made the names of William Mackenzie and D. D. Mann, of the Canadian Northern R. R. Co., have been added. A clause in the charter provides that the company may take over all rights, etc., of the Saskatchewan Northwestern R. R. Noted on Jan. 21.

SOUTHWEST ALBERTA.—This company is applying for incorporation to build various lines in southwestern Alberta from the boundary line between Alberta and Montana. The incorporators are O. W. Laboree and R. D. Miller, Spokane, Wash.; James Finlay and A. C. Kemmis, Pincher Creek, Alb.

STAMFORD & NORTHWESTERN.—The FIDELITY CONSTRUCTION FO., of Fort Worth, Tex., has the contract for building this railroad and 75 miles of work has been sublet to P. M. JOHNSON, of St. Elmo, Ill. This does not include track. Connection will be made at Stamford with the Wichita Valley lines and the Texas Central Railway, and at Sagertown with the Kansas City, Mexico & Orient Railway. The line will run from Stamford to Plainville, via Sagertown and Aspermont, Tex., 170 miles. L. M. Buie is Pres.; R. V. Colbert, Vice-Pres.; L. B. Peyton, Secy., all of Stamford; S. M. Hudson, Treas., of Fort Worth, Tex; P. G. Burns, of Houston, Tex. Noted on Jan. 14.

VIRGINIA.—It is announced that J. H. Macleary, Suffolk, Va., is in the market for 10½ miles new or relaying 60 or 70-lb. rails, with angle bars and bolts complete; also four miles new or relaying 40-lb. rails, with angle bars and bolts complete; name dealers' prices and point of delivery.

ELECTRIC RAILWAYS.

DANBURY, CONN.—The Danbury & Harlem Traction Co. has been sold at auction by order of the Supreme Court of New York State. It was bought by H. Hector McNeil, of Philadelphia, representing the Protective Committee, which was appointed by the bondholders after the road became involved in its final financial difficulties. The railway will connect Danbury, Conn., and North Salem, N. Y., 17½ miles. James E. Walsh is Counsel, 60 Wall St., New York. Noted on Dec. 17.

WOODBURY, CONN.—The State Railroad Commissioners have approved the method of construction and the layout of the extension of the trolley line from the present terminus of the Connecticut Co.'s system in Woodbury to North Woodbury.

BROOKLYN, N. Y.—Jos. J. Baughman, New Cumberland, Pa., an incorporator of the South Flatbush St. R. R. Co., advises us that construction contracts probably will be let in March. As noted on Jan. 14, this company, with $30,000 capital, has been organized to operate a street surface electric road three miles long from the Brighton Beach line of the Brooklyn Union Elevated Railroad Co. at Ave. Q to Ave. Q and Flatbush Ave., Borough of Brooklyn. Right-of-way is secured, capital obtained and survey made. J. C. Langan, 178 Remsen St., Brooklyn, is Pres.; Geo. H. Gifford is Ch. Engr.

ELIZABETH, N. J.—The Traction Development Co. has been incorporated by P. A. Peterson, 138 Smith St., Perth Amboy; C. A. Trimble, 208 Broad St., Elizabeth; Richard F. Pettigrew, Richard M. Montgomery, Dr. H. B. Hoagland and W. J. Lansley. Percival S. Jones, 27 Pine St., New York, is Atty. Company was incorporated to secure right-of-way, franchises and engineering plans for the Elizabeth & Perth Amboy Traction Co. Capital stock, $100,000.

PITTSBURG, PA.—The Pittsburg, Chester & East Liverpool Traction Co. has organized with J. M. Mead, Pittsburg, Pres.; A. M. Buchanan, Morgantown, W. Va., Secy., and J. H. McLaren, Murdocksville, Pa., Treas. The line will be 34 miles long, extending from Chester, W. Va., through Murdocksville to Carnegie on the outskirts of Pittsburg. Surveys for the line have been completed, it is announced. Construction work may start in the spring.

BEAVER FALLS, PA.—The Beaver Falls & New Castle St. Ry. Co. will construct its line this summer, it is stated. The railway will be 22 miles long, connecting Beaver Falls, Koppel, Wampum, West Pittsburg and New Castle. C. Strohecker, Zelienople, Pa., is Gen. Mgr.

CLIFTON HEIGHTS, PA.—The Philadelphia & Garrettford St. Ry. Co. will build an extension from Clifton Heights to Lansdowne. W. A. Hall is Ch. Engr., Llanerch, Pa. The Philadelphia & Garrettford Co. is controlled by the Philadelphia and West Chester Traction Co.

PARKESBURG, PA.—The Susquehanna Railway, Light & Power Co., which owns the Lancaster trolley lines, has purchased the property and franchises of the Philadelphia, Coatesville & Lancaster Passenger Ry. Co. for $137,500. The latter company has a line in operation between Coatesville and Parkesburg. The new owners will at once begin construction of the link between Christiana and Parkesburg. C. Edgar Titzel, Lancaster, is Mgr.

MEADVILLE, PA.—The Central Crawford Traction Co. probably will begin the construction of its proposed electric road this spring. It will be about 28 miles in length, connecting Meadville and Titusville. Dennis Smith, Guy Mills, Pa., is Pres.; Henry Dewey, Blooming Valley, Pa., Vice-Pres.; J. W. Heard, Blooming Valley, Secy. and Treas.

ASHEVILLE, N. C.—The Asheville & East Tennessee Railroad Co. has been chartered to take over the line of the Weaverville Electric Co. and continue construction of it to Huntdale, N. C., connecting with the Carolina, Clinchfield & Ohio Ry. Line is graded to Weaverville. It will be operated there in April.

BILTMORE, N. C.—A company under the title of the Swannanca Valley Co. plans to build an electric railway between Biltmore and Montreal. F. T. Merriwether is Pres.; W. R. Whitson is Vice-Pres.; J. M. Chiles is Secy. and Treas., all of Asheville, N. C.

OBERLIN, OHIO.—The Oberlin & Lorain Ry. plans to build its line between Oberlin and Lorain, via North Amherst, this year. W. F. Stanley, Conneaut, Ohio, Pres.; C. R. Summers, 7 South Main St., Oberlin, Secy.; George C. W. Westervelt, Oberlin, Treas.

WOOSTER, OHIO.—The Wooster & Mansfield Elec. Ry. Co. will build an electric railway from Wooster to Shreve, Big Prairie, Lakeville, Londonville, Perrysville, Lucas and Mansfield, 41½ miles. Catenary construction will be used. The power plant will be erected at Londonville. The company probably will furnish power for lighting. Capital stock authorized, $30,000; issued, $10,000. Bonds authorized, $1,000,000. B. L. Chase, Mansfield, is Pres.; David Collier, Plimpton, Vice-Pres. and Gen. Mgr.; D. M. Graven, Londonville, Secy.; Charles Brumfield, Mansfield, Treas.

CHICAGO, ILL.—An expenditure of $4,000,000 for roadbed rehabilitation, including the immediate purchase of rails, ties, cement and other construction materials, has been authorized by the board of supervising engineers to be applied on the improvement of the system of the Chicago Railways Co. The purchase includes all the items called for by the company's program to lay 112.16 miles of track this year with the exception of the special work. On the details of that the board now is at work, and orders, it is announced, will be placed at an early date. Everything included, the plans to be adopted call for the expenditure of $12,000,000 during the spring, summer and fall months. Contracts are to be placed for 22,453 gross tons of 9-in. steel rails, 208,053 ties, 101,212 tie rods, 416,106 tie plates, 832,212 screw spikes, 832,212 lag screws, 21,306 rail joints, 258,516 bbls. cement, 213,494 cu. yds. stone, 539,510 sq. yds. paving granite and 1,079,020 gals. tar. J. M. Roach is Pres. and Gen. Mgr., 444 N. Clark St. N. M. Thorrsen is Pur. Agt., 444 N. Clark St., Chicago.

MORRIS, ILL.—The Chicago, Ottawa & Peoria Railway Co., a subsidiary line of the Illinois Traction System, has filed its acceptance of the one-year extension of its franchise for completing the line between Morris and Seneca.

CHEROKEE, KAN.—The Joplin & Pittsburg Elec. Ry. Co. has been granted a franchise in Cherokee by the City Council for building its line from Weir Junction into Cherokee, a distance of five miles. It is to be constructed within six months. R. W. Harris, Pittsburg, Kan., is Gen. Mgr. Noted on May 7, '08.

MISSOULA, MONT.—Citizens at a special election have instructed the City Council to grant J. R. Wharton, of Butte, Mgr. of the W. A. Clark properties in Montana, a street railway franchise for 50 years. Noted on Dec. 31.

HELENA, ARK.—Surveys have been made and capital for construction has been secured for the 10-mile electric street railway to be built by the Helena Street & Interurban Co. of Helena. It will connect Helena and suburban territories. Contracts for the construction are to be let this spring. J. W. Burks, Jr., Helena, Ark., is Pres. Noted last week.

MANGUM, OKLA.—We are officially advised that the Southwest Interurban R. R. Co. may let construction contracts this spring. Capital has not been all secured. Surveys are not made. Right-of-way is partly obtained. The road will connect Mangum, Granite, Altus, Blair, Hollis, Vinson, Reed and Cordell, 90 miles. The motive power will be electricity. The power station and repair shops will be located at Mangum. Capital stock, $1,000,000. Office, Mangum. Officers: J. W. Solomon, Reed, Okla., Pres.; H. M. Ferguson, Mangum, Vice-Pres.; J. C. McCollister, Mangum, Secy.; James Duffy, Vinson, Okla., Treas. Engineer has not been appointed yet.

SHERMAN, TEX.—J. P. Hornaday & Co., 32 Cortlandt St., New York, have completed arrangements for financing the Gainesville, Whitesboro & Sherman Electric Ry., construction work on which was started two years ago. Line will be operated by gasoline or electric power.

BELLINGHAM, WASH.—The Nooksack Valley Traction Ry. Co. has been granted a 30-year franchise in Bellingham. We were officially advised in October, 1908, that company planned "to let contracts in about 90 days for building its proposed railway from Bellingham to Blaine, and from Bellingham to Sumas, Ferndale, Lynden, etc., 60 miles. Right-of-way has been secured. First section of survey has been made. J. S. Wheeler, Seattle, Wash., is Pres. The line will have an easy grade which will not be over 2%." Noted on Aug. 20 and Oct. 29.

ST. LAMBERT, QUE.—The ratepayers have voted in favor of granting a franchise here to the Montreal & Southern Counties Electric R. R. Co.

CALGARY, ALTA.—Bids are asked by the City Commissioners until noon, Feb. 18, for supplying to the city the following materials: Approximately 397 long tons No. 80 A. S. C. E. steel rails; 746 long tons No. 60 A. S. C. E. steel rails; together with certain special work, also spikes, bonds, tie plates; angle irons, track bolts, ties, etc.; 12 standard street railway cars; one street railway sprinkler; one street railway sweeper.

Overhead Construction: Steel span wire poles 30 ft. and 35 ft. three sections; cedar poles; 12.5 miles of 2.0 trolley wire; 10.2 miles of 3.0 feed wire; span wire; hangers, insulators and conical strain insulators; ears; cross-overs and trolley frogs. Bids will be received upon the entire schedule or any item of the same. H. E. Gillis, City Clerk.

REGINA, SASK.—The Regina Interurban Tramway Co. has been incorporated to construct an electric railway from Regina to Long Lake and from that point a circular line running around Regina. Surveys are now being made. Construction may commence in the spring. Capital stock, $350,000. Incorporators: J. L. R. Parsons, Regina; R. R. Barber, Georgetown, Ont.; C. J. Harris, Brantford, Ont.; W. M. Logan, J. F. Frame, Regina; J. H. Houser, Toronto, Ont.

COBOURG, ONT.—Application will be made to the Legislature of Ontario at the next session for an act to incorporate the Cobourg, Port Hope & Havelock Electric Railway Co., by Col. H. A. Ward, K. C., Port Hope. The chief provisional directors are Wm. J. Crossen, Cobourg; Col. Ward, ex-M. P. for Durham County; Bernard McAllister, Cobourg, and Joseph Knox, Havelock. The main line will run from Port Hope to Cobourg, thence across country to Warkworth, to Campbellford and on to Havelock. A branch line is to run from Cobourg to Gore's Landing.

LIGHT AND POWER PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

LEWISTON, ME.—According to the Boston "Transcript," a bill has been introduced in the State Legislature at Augusta, to incorporate the Androscoggin Reservoir Co. The object is to obtain legislative authority to build a dam on the Magalloway River and create a basin in order to increase and make more constant the flow of water in the Androscoggin River and for use for power and manufacturing purposes. The following incorporators were named: William P. Frye, U. S. Senator; Hugh J. Chisholm, Herbert J. Brown, Francis W. Fabyan, Waldo Pettengill, A. N. Fairbanks and Wallace H. White. The corporations directly interested in making this improvement and represented by the incorporators are the Union Water Power Co., the Berlin Mills Co., the International Paper Co. and the Rumford Falls Power Co. and the rights of the Magalloway Dam & Improvement Co. The plan contemplates the erection on the Magalloway River of a dam at a cost of about $300,000 and the formation of a storage basin capable of holding about 8,000,000,000 cu. ft. of water, or about one-half the quantity retained by the dams of the Union River Power Co. at the outlets of four lakes. When filled with water a lake will be formed about twelve miles long and of an average width of about a mile. It is a storage proposition, according to the promoters, a conservation of the water which is now wasted; and with the water now stored by the dams of the Union Water Power Co., will furnish the Androscoggin River 24,000,000,000 cu. ft. of stored water. This amount of stored water at the head waters of the Androscoggin River will enable the mills at Lewiston to run their full capacity every day in the year through any drought of any severity and in addition will increase the total constant power at Lewiston about 25% or, in other words, will add about 4,000 HP. to the present available water power at Lewiston.

ANTRIM, N. H.—The Goodell Co., owner of the local electric light plant, has decided to develop a water power at North Branch, about four miles from this village. A 500-KW. generator will be installed. It is reported that about 500 HP. will be developed, which will be more than the company requires at present, and it will probably have power to sell. It is expected to install the plant during the coming summer. David H. Goodell is Pres.

PITTSBURG, PA.—The Pittsburg Railways Co., Sixth Ave., has awarded the contract for furnishing a 5,000-KW. generator for the Brunots Island power plant to the WESTINGHOUSE ELECTRIC & MFG. CO., of Pittsburg. The contract for furnishing and installing all steam and exhaust piping in connection with setting up this generator has been awarded to the PITTSBURG VALVE, FOUNDRY & CONSTRUCTION CO., 26th St. and A. V. R. R., Pittsburg.

READING, PA.—At a recent meeting of the Board of Directors of the Metropolitan Electric Co., arrangements were completed by which that company takes over the immediate erection and ownership of the projected power plant across the Schuylkill River. Under the new management, the $150,000 of Metropolitan bonds now outstanding will be called in and paid April 1, and a new issue of bonds to the amount of $2,000,000 will be made by the Metropolitan Co. This entire issue has been purchased by the banking firm of E. B. Smith & Co., Broad and Chestnut Sts., Philadelphia. Plans and specifications for the power plant will be placed in the hands of bidders at once by Walter J. Jones, Constr. Engr., 60 Wall St., New York, and the contract will be awarded at once. The construction of the new power plant and sub-stations will cost over $2,000,000. The central distributing station of the new plant in this city will be at the Metropolitan Co.'s present plant on South Seventh St. There will be eight other sub-stations for distributing the power, located, respectively, at Carsonia Park, Oley Line, Shanesville, Ringing Rocks, Mohnton, Robesonia, Neversink water power station at Klapperthal, and at the Tenth St. car barn. K. A. Fichthorn, Reading, is Gen. Mgr.

WASHINGTON, D. C.—Bids are asked by the Bureau of Engraving and Printing, Treasury Department, Washington, D. C., until March 22, to furnish electrical supplies, etc., during the fiscal year beginning July 1, 1909. Joseph E. Ralph is Director of Bureau.

ATLANTA, GA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., March 2, for the installation of a conduit and electric wiring system for the U. S. post-office and court-house building at Atlanta.

EAST POINT, GA.—Contracts for construction and equipment of the municipal electric light plant, bids for which were received on Jan. 19, have been awarded as follows: For generator and other electrical equipment to the WESTINGHOUSE ELECTRIC & MFG. CO., of Pittsburg, Pa.; for engine, to HOOVER, EWENS & RENTSCHLTR CO., and to SULLIVAN & LONG, of Bessemer, Ala., for construction of power-house. Contract for pole line has not been awarded.

BELLEVUE, KY.—The City Council has adopted plans submitted by George Hornung & Sons, Engrs., Johnson Bldg., Cincinnati, Ohio, for the construction of a municipal electric light plant. The plans submitted call for a plant with sufficient output to supply electricity for 74 arc lamps and the necessary commercial [illegible]ing, the cost of which is estimated at [illegible]. The cost of operating the plant w[illegible] be about $11,000 per year. Noted last [illegible]

CANFIELD, OHIO.—[illegible] Smith, of Canfield, is at the head of [illegible] company which is being formed, and whi[illegible] build an electric light and power [illegible]. The concern will be known as the C[illegible] Electric Light, Heat & Power Co. The [illegible] will cost about $25,000.

LA FAYETTE IND.—[illegible]uncement has been made that the For[illegible]yne & Wabash Valley Traction Co. wi[illegible] work soon remodelling its power-ho[illegible] this city. It is probable that the r[illegible]d plant will serve a double purpose, [illegible] used to generate power for the tract[illegible] and to furnish power for the Ind[illegible] Lighting Co., which owns electric li[illegible]anchises and plants in a number of [illegible]a and Ohio cities. Between $100,000 [illegible] $200,000 will be expended on the pla[illegible]hich will be equipped with modern t[illegible] generators, and will serve as a twin [illegible] to the monster power-house at For[illegible]yne. C. D. Emmons, Fort Wayne, is G[illegible] Mgr.

NORTH MANCHESTE[illegible] IND.—The Browne-Mills Electric Co. w[illegible]stall a 250-KW., 3-phase alternator, [illegible] connected to an Allis-Chalmers Corl[illegible]gine, in its plant next May. The com[illegible] proposes to establish a day service for [illegible]er.

MANISTEE, MICH.—The M[illegible]stee River, above the Pere Marquette R. [illegible] crossing at High Bridge, about 18 mi[illegible] northeast of this city, is to be harnessed, [illegible]d electrical power developed to supply [illegible] city and some of the outlying country. The Manistee County Electric Co., capitali[illegible] at $30,000, will spend between two and three million dollars on river improvements as soon as the waters permit. The organization is headed by E. N. Salling, owner of the property; R. W. Smith, Vice-Pr[illegible], and Clyde J. Holmes, Secy. and Treas. The other directors are W. F. Baker, A. C. Christianson and George M. Burr. The first step in the line of developing power will be to build a concrete dam, 90 ft. high, across the river, which at that point is about 1,100 ft. wide. The waters will be affected for a distance of ten miles up stream. It is expected that a year will be consumed in the building of this dam. Most of the power generated will be used in this city, it is expected.

SPRINGFIELD, ILL.—The Springfield Consolidated Ry. Co. is planning to enlarge its power station by installing a 1,500-KW. unit, the type of which has not been decided upon. H. H. Jones is Gen. Supt.

PINE CITY, MINN.—J. M. Allen and R. P. Allen are interested in the construction of a 600-HP. hydro-electric plant, with an 8-mile transmission line having a potential of 10,000 volts. Bids for the construction of the plant will be received about March 10. It is proposed to form a company under the name of the Pine City Power Co. with a capital stock of $50,000 to operate the plant. J. M. Allen is Engr. The cost of the plant is estimated at $25,000. Noted on Jan. 28.

OMAHA, NEB.—The Omaha & Council Bluffs Street Ry. Co. has bought a plot of ground adjoining its power plant on the south for the plant's enlargement. This is known as Sub-lot No. 1 of Government Lot No. 3 and is 142 × 284 ft. H. B. Noyes, Ch. Engr. of the company, is figuring on enlargements made necessary by new extensions and the larger cars. Boilers and turbine engines will be added to the plant to handle this extra business and an addition to the house will be built.

FOWLER, KAN.—Application has been made to the City Council for a franchise to install an electric light and ice plant in Fowler by R. B. Flesch & Co. The company proposes to erect a plant in the town to cost about $25,000.

PARSONS, KAN.—The Parsons electric light plant has been sold to the Parsons Street Railway & Electrical Co. for $90,000, it is stated. The company has a street failway franchise and will commence the construction of the railway system at once and will spend about $50,000 on rebuilding the electric light plant. The company is capitalized for $400,000.

MACON, MO.—We are officially advised that the city will take bids in about 60 or 90 days for improvements to the municipal steam electric lighting plant. The improvements will cost $18,400 and the plant will supply 40 arc and 5,000 16-c.p. incandescent lamps. Among the improvements will be: 300-HP. engine; 125-HP. tubular horizontal boiler; 3-phase alternator, 200 to 250-KW.; centrifugal pumps, etc. E. S. Bennett is Supt. and Engr.

ST. LOUIS, MO.—The Board of Public Improvements has granted the West End Light & Power Co. permission to construct a conduit on Grand Ave., from Manchester Ave. to Lucky St., to cost $80,000. The company is to operate under the old Browning-King franchise. It is said that the first power plant will be located in Mill Creek Valley, near Grand Ave. Plans for the main underground conduit have been completed and plans for the power-house will be ready within a short time.

TERRELL, TEX.—Bids are asked until about Feb. 10 for the construction of a municipal electric light plant, which will include the erection of a power-house at a cost of $2,000 and installation of steam and electrical machinery to cost $15,000. W. C. Drake is Engr.-in-Charge. The plant is to be operated in connection with the waterworks system.

FORT WORTH, TEX.—The following bids were opened on Jan. 26 by the Chief Clerk of the Treasury Department, Washington, D. C., for installing lighting fixtures in the U. S. public building at Fort Worth, Tex.: Edward Miller Co., Meriden, Conn., $4,185; Morreau Gas Fixture Manufacturing Co., Cleveland, Ohio, $3,873; Wahle-Phillips Co., New York, $3,300; F. Storsberg, Newark, N. J., $3,290; Horn & Brannon, Philadelphia, Pa., $4,249; Cassidy & Son Mfg. Co., New

York $3,950; Mitchell-Vance Co., New York, $5,6... R. Williamson & Co., Chicago, Ill., $4,6... Charles Polacheck & Bro., Chicago, Ill., $5,061; David J. Braun Mfg. Co., Chicago, Ill., $3,510.

GREELEY, COLO.—We are officially advised that the Home Gas & Electric Co. has been incorporated with a capital of $200,000, and has acquired the plant of the ... Electric Light & Power Co., which it will enlarge to serve the demand for electric light and power. The new company will furnish gas for illuminating and other purposes. Robert McF. Doble, Majestic Bldg., Denver, Colo., is Consult. Engr.

CASHMERE, WASH.—The Valley Power Co. is planning to increase the output of its plant from 300 to 1,000 HP. The cost of the work is estimated at $125,000.

SEATTLE, WASH.—We are officially advised that the following bids were received on Jan. 22 by the Board of Public Works, Seattle, for installing cluster lights on Second Ave., etc.: (a) Sub-division No. 1, including street work, conduits, etc.; (b) Sub-division No. 2, pole furnishings, transformers, cables, etc.; (c) Sub-division No. 3, ornamental iron poles and extra cross-arms: Charles F. McDonald, Seattle, (a) $20,096; (b) $9,778; Eugene Hockett, Seattle, (a) $...; Elliott Bay Iron Works, Inc., 316 Railroad St., South, Seattle, (a) $24,145; ...blau, Freeze & Peterson, Alaska Bldg., Seattle, (a) $22,406; Meacham & Babcock, Third and Marion Sts., Seattle, (a) $20,616, (b) $8,641; Agutter-Griswold Co., Seattle, (b) $8,820; F. T. Crowe & Co., Globe Block, Seattle, (c) $4,125; Olympic Foundry Co., Eighth St., South and Plummer St., Seattle, (c) $3,955.

WATERLOO, ORE.—J. B. Lethwaite has taken water rights and will erect a power plant at Waterloo, on the South Santiam River, six miles from Lebanon, to furnish power for the paper mills there. Mr. Lethwaite is interested in the mills at Oregon City as well as at Lebanon.

SAN FRANCISCO, CAL.—We are officially advised that the Great Western Power Co., Crocker Bldg., San Francisco, and 25 Broad St., New York, N. Y., has awarded contract for 16 transmission towers to the Receivers of MILLIKEN BROS., 11 Broadway, New York.

LOS ANGELES, CAL.—The Edison Electric Co. will expend $500,000 enlarging its plants in the towns surrounding Los Angeles, including Pomona, Redlands, Riverside, Santa Barbara, Monrovia, Santa Monica, Ocean Park, Venice, San Pedro and Long Beach. John B. Miller is Pres. of the company.

AMERICAN FORK, UTAH.—Richard R. Lyman, C. E., Engineering Bldg., University of Utah, Salt Lake City, Utah, informs us that he is making a survey for a power plant for the Utah County Light & Power Co., of American Fork, Utah. The total cost of this plant is to be over $110,000. In addition to the machinery that will be needed in this plant, a steel pipe, 4,000 ft. long, that is to carry a maximum flow of 15 cu. ft. per second, with a maximum head of 2,200 ft., will be required. Water-wheels, dynamos, and overhead wiring will be used. Contracts will be let in about three weeks; that for the pipe line probably will be let first. Noted on Dec. 31.

PHOENIX, ARIZ.—Press reports state that L. C. Hill, Engr., has reported that 23,900 HP. may be developed on the Salt River reclamation project, as follows, numbered from Roosevelt toward Phoenix: No. 1, Roosevelt, 7,200 HP.; No. 2, midway between Roosevelt and Fish Creek, 3,500 HP.; No. 3, near Bagley Flat and west of the mouth of Cottonwood Wash, a northern tributary of Salt River, 2,500 HP.; No. 4, a short distance above the mouth of the Verde River, 4,500 HP.; No. 5, about a mile below Granite Reef dam, in the main canal now under construction, to connect the Consolidated and the Granite Reef gates, this canal being the heading for the entire southside system, 1,500 HP.; No. 6, the present so-called Chandler plant on the crosscut between Temple and Mesa City, 1,000 HP.; No. 7, the site east of the Hole-in-the-Rock on the proposed new crosscut from the Arizona to the lower ditches to take the place of the one now in use, 4,500 HP.; No. 8, a site in a proposed drop from the new Grand to the Maricopa Canal, after the former is connected with the new crosscut east of the Hole-in-the-Rock. This site will be about opposite the present joint head some distance this side of Tempe, or a little to the east of the old mound on the Tempe road, and will develop 300 HP.; No. 9, the present powerhouse of the Acme Gas & Electric Co. at the falls of the Arizona. By placing new machinery in the power-house there, at least a third more power can be developed, making 700 HP. The plant at Roosevelt is expected to produce considerably more than 7,200 HP., though that is the amount credited to it. The surplus there and the surplus over and above the conservative figures given for all these plants will make up the other 300 HP. for the total of 26,000, and probably more. The plants to comprise the initial supply of power are Nos. 1, 5, and 9, as follows: Roosevelt, the new one in the Consolidated supply canal, and the one at Arizona Falls, totaling 9,400 HP., of which 3,900 is sold or reserved.

TORONTO, ONT.—Plans for the distribution system in connection with the municipal lighting plant are under way, and it is expected that bids will be advertised for underground cables within 30 days. The cost of the first installation is estimated at $50,000. The Hydro-Electric Power Commission is expected to be in a position to furnish electricity to the city by next December. K. L. Aitken, City Electrician, has been instructed to take charge of the electric light plant in East Toronto, which will become the property of the city under the terms of the annexation agreement. The plant has an output of about 200 HP.

TORONTO, ONT.—Within a month the city will call for underground cable work in connection with the electrical distributing plant. C. H. Rust is City Engr.

EDMONTON, ALTA.—The contract for an 1,800-HP. steam engine to cost $27,800, f. o. b. Edmonton has been let to GOLDIE & McCULLOCH, Galt, Ont. The engine is designed to operate a 1,000-KW. alternator which was purchased from the CANADIAN GENERAL ELECTRIC CO. for $14,300. Bids were submitted for both gas engines and steam engines, but acting upon the Commissioner's report the Council decided in favor of the steam plant. According to the Commissioner's report the cost of a steam plant, together with all auxiliaries, would be $74,350, while a gas producer plant of the same capacity would cost over twice that amount. Owing to the low price of coal, the saving of a gas engine over a steam engine was not compatible with the increased expenditure necessary, and as a result the Council authorized the purchase of the steam engine.

*LETHBRIDGE, ALTA.—Specifications for the proposed municipal power plant, to be built in this city, are on file at the office of Engineering News, New York. Bids are asked until March 1. Smith, Kerry & Chace, Confederation Life Bldg., Toronto, Ont., are Consult. Engrs.

BRIDGES.

HYDE PARK, MASS.—We are officially advised that the Board of Selectmen on Jan. 27 awarded the contract for constructing a reinforced concrete arch bridge over the Neponset River in Hyde Park to the BRYNE CONTRACTING CO., 46 School St., Boston. The bridge consists of two arch spans of 45 ft. 6 ins. and is 52 ft. wide. Clarence G. Norris is Town Engr.

BINGHAMTON, N. Y.—John A. Giles, City Engr., is preparing plans for two concrete culverts, one over Park Creek at Elm St. and one over Park Creek, near Ross Park entrance. Bids will be asked for in a few weeks by the Board of Contract and Supply.

RENSSELAER, N. Y.—The New York Central & Hudson River R. R. Co. is having plans prepared for rebuilding the Broadway viaduct here. G. W. Kittredge is Ch. Engr., New York.

BOONTON, N. J.—The Morris County Board of Freeholders have decided to expend about $8,000 for repairs to the iron bridge, 475 ft. long, across the Rockaway River, at Washington St.

HANOVER, PA.—The citizens of Luzerne and York Counties are considering the construction of a bridge over the river, connecting Hanover and Plymouth, the structure to be about 2,141 ft. in length, of steel and concrete. Estimated cost, about $175,000.

SHIPPENSBURG, PA.—The Philadelphia & Reading Ry. Co. has awarded to the JOHN A. KELLY CO. contracts for various short bridges over streets and alleys and the tracks of the Cumberland Valley R. R. in Shippensburg, in connection with the building of a permanent connection with the Cumberland Valley tracks. William Hunter is Ch. Engr., Philadelphia.

ANNAPOLIS, MD.—Bids are asked until 11 a. m., Feb. 9, by the County Commissioners of Anne Arundel County for the repair and improvement of the draw of the Curtis Creek bridge. W. W. Webb is Clk. Comrs.

LYNCHBURG, VA.—Bids will be received by the Joint Committee on Streets and Sewers at the office of H. L. Shaner, City Engr., until Feb. 15 for the construction of a reinforced concrete viaduct.

MONTGOMERY, W. VA.—The OWEGO BRIDGE CO., of Owego, N. Y., has secured the construction of the toll bridge here, at $90,000.

HARRISONBURG, LA.—Bids will be received by the President of the Police Jury, Harrisonburg, until April 5 for constructing a steel bridge for the Bushley Bayou, near Harrisonburg; also, same time and place, for repairing the steel bridge at Jonesville. W. H. Bethard is Clk. of Police Jury, Harrisonburg.

NASHVILLE, TENN.—A bill has been introduced in the Legislature to provide for the issuance of $250,000 of bonds for the construction of bridges in Davidson County.

CLEVELAND, OHIO.—The County Commissioners on Jan. 30 announced the route of the Denison-Harvard viaduct, and will soon call a meeting of all property owners whose land may be needed for the new bridge. The line of the structure is ¾ of a mile long, running from a point 137 ft. west of the intersection of Foster and Denison Aves., east to Harvard Ave., at the Austin Powder Co.'s plant. The report of A. B. Lea, County Surv., and the Bridge Engineer fixes the bridge 86 ft. above the level of the flats, and 103 ft. above the Cuyahoga River. The total length will be $3,950 ft. About 12,000 cu. yds. of fill will be required for the east approach. The bridge roadway will be 40 ft. wide, with concrete base and brick pavement. There will be two 8-ft. cement sidewalks. The piers in and near the river will rest on solid shale, the tops of all pedestals being placed about two feet above the high water mark to keep the steel from coming in contact with ice floes.

EAST PALESTINE, OHIO.—Bids will be received by the Board of Commissioners of Columbiana County, Lisbon, until 1 p. m., Feb. 15, for building abutments for a bridge near the pumping station, at East Palestine; also for the erection of a steel and iron skew bridge, 50 ft. long, with a 14-ft. clear roadway and a 6-ft. sidewalk on one side. C. H. Cobourn is Clk. Comrs.

NORWALK, OHIO.—Bids are asked until 11 a. m., Feb. 15, by the County Auditor, for building a sandstone abutment at the west end of the Green Creek bridge on the Maumee Pike; also for the erection of steel joists and putting in a kreodone block floor system on the same bridge.

CLEVELAND, OHIO.—Bids are asked until 11 a. m., March 3, by the County Commissioners for bridge work per report No. 2,210. A. B. Lea is County Surv.

COLUMBUS, OHIO.—The City Council on Jan. 25 passed a resolution instructing Henry Maetzel, City Engr., to prepare plans and estimates for the erection of a viaduct at Third St.

LISBON, OHIO.—The County Commissioners will let three bridge contracts on Feb. 8. The first is for the erection of two bridge abutments at bridge No. 462 in Butler Township. The second contract will be for the construction of a deck bridge at the above point 30 ft. in length with a clear roadway of 14 ft.

MASSILLON, OHIO. — The Massillon Bridge & Structural Co., of Massillon has been incorporated with $250,000 capital stock by H. A. Croxton, C. S. Davis, C. A. Gates, J. C. Corns and Fred H. Snyder.

INDIANAPOLIS, IND.—The Board of Public Works is preparing to ask for bids for the construction of two bridges, one across Pleasant Run and one across the canal at 30th St. Blaine H. Miller is City Engr.

The Commissioners of Marion County have sold $100,000 of bridge bonds and bids will soon be asked for the repair of various bridges. The County Council has been petitioned for an issue of $400,000 of bonds, the proceeds to be used for constructing several bridges.

LUDINGTON, MICH. — The JOLIET BRIDGE CO., Joliet, Ill., has been awarded the contract at $3,800, for completing the bridge over Lincoln Lake, by extending structural work about 250 ft., and constructing a cement floor.

CAMBRIDGE, ILL.—The Commissioners of Henry and Rock Island Counties have decided, it is stated, to construct a bridge over the Rock River. Estimated cost, $33,000.

CHANDLERVILLE, ILL.—The County Boards of Cass and Mason Counties have rejected all bids for the construction of a bridge over the Sangamon River near here. Four bids were received, ranging from $4,150 to $5,357.

CHARLES CITY, IOWA.—The MARSH BRIDGE CO., of Des Moines, has been awarded the contract for constructing a steel-concrete bridge over the Cedar River at Main St., at $38,474.

WASECA, MINN.—Bids will be received by the Board of Commissioners of Waseca County until 10 a. m., Feb. 16, for the construction and repair of bridges in different parts of the county. Theodore Peterson is County Audr.

MINNEAPOLIS, MINN.—Bids are asked until 11 a. m., Feb. 8, by Hugh R. Scott, County Audr., for repairing bridge No. 18.

GRAND FORKS, N. DAK.—Bids are asked until 10 a. m., Feb. 12, by Hans Anderson, County Audr., for constructing any or all steel and wooden bridges that may be ordered during 1909.

CRAB TREE (Red Rock post-office), MONT.—The contract for constructing a 65-ft. steel bridge on the Red Rock River at Crab Tree has been awarded by the County Commissioners to CHARLES G. SHEELEY, 219 McPhee Bldg., Denver, Colo.

HOCHHEIM, TEX.—Bids will be received until Feb. 6 by the Commissioner's Court, Cureo for constructing a bridge across Gaudalupe River, near Hochheim. Rudolph Kleberg, Jr., is County Judge.

COYLE, OKLA.—The County Commissioners have awarded the contract for the construction of the steel bridge across the Cimaron River, near Coyle, to the CANTON BRIDGE CO., of Canton, Ohio, at $18,619. The bridge will be 750 ft. long, with a 16-ft. roadway, piers to be steel cylinder tubes filled with concrete.

TACOMA, WASH.—Plans, specifications and estimates have been prepared by the City Engineer's department for the following bridges: South Yakima Ave. bridge, single-arch concrete structure, 334 ft. long, $99,624; Puyallup Ave. bridge between A and East C Sts., 700 ft. long, 100-ft. roadway, $90,582; North 23d St. bridge, 344 ft. long, $87,000; North 21st St. bridge, between Fife and Anderson Sts., $59,000; Tacoma Ave. bridge, $75,000. Total cost, $412,000. Frank L. Davis is City Engr.

SEATTLE, WASH.—R. H. Thomson, City Engr., has estimated the cost of constructing a pile bridge on Whatcom Ave. at $5,400.

WARNERSVILLE, CAL.—Bids were opened as follows on Jan. 14 by the Board of Supervisors for constructing a bridge over Dry Creek, near here: Cotton Bros. & Co., $4,900; Mervy-Elwell Co., $4,935; Hyde-Harjes Co., $5,100; Healy-Tibbits Co., $5,650; W. A. Stevens, $6,206; Western Bridge & Construction Co., $5,000; Clark & Henry Construction Co., $5,950; Modern Steel Structural Co., $4,765; Charles G. Sheeley, $4,725; PACIFIC CONSTRUCTION CO., 17 Spear St., San Francisco, Cal. (awarded contract), $4,697.

PHOENIX, ARIZ.—Plans are being prepared for the construction of a bridge across the river at Center St. Estimated cost, between $55,000 and $60,000.

TORONTO, ONT.—Bids will soon be asked by the city for the construction of a bridge at the foot of Bathurst St. C. H. Rust is City Engr.

BUILDINGS.

BOSTON, MASS.—The building known as the Brewer Building, at the corner of Devonshire and Franklin Sts., is being razed to make room for the proposed building of the John Hancock Mutual Life Insurance Co. The new building will be a duplicate of and adjacent to the present building owned by the company. It will be constructed of stone, ten stories high and will cost about $500,000. Shepley, Ruttan & Coolidge, Ames Bldg., Boston, are Archs.

PLYMOUTH, MASS.—Bids are asked by the Commissioners of Plymouth County, until 3 p. m., Feb. 15, for the electric work, plumbing, heating, roofing, windows and doors, and the iron work for the Plymouth County jail and House of Correction, Plymouth, Mass. J. Williams Beal, 58 Summer St., Boston, Mass., is Arch.

WORCESTER, MASS.—Contract for erecting the proposed Union Station at Worcester has been awarded by the Boston & Albany R. R. Co. to WOODBURY & LEIGHTON, 166 Devonshire St., Boston. The station will cost approximately $500,000 and the contract calls for the structure to be ready for occupancy not later than July 23, 1910. E. E. Stone, Boston, is Ch. Engr.

NEW BRITAIN, CONN.—John F. Sweeney has applied for a permit to construct a 4-story brick block on Main St. The block will have eight stores on the ground floor.

NEW YORK, N. Y.—The Bryant Building, at 55 Liberty St., corner of Nassau St., has been sold by the Bryant Building Co. to the C. L. Gray Construction Co., Victoria Bldg., St. Louis, Mo. The property will be taken over on May 1 by a company yet to be incorporated. Work will be begun immediately on a 30-story building on the site, plans for which are now being prepared by Henry Ives Cobb, Arch., 42 Broadway, New York.

Plans have been filed for a 12-story loft building to be erected for the Schlegel Investing Co., 138 Centre St., at the corner of Second Ave. and 22d St., from plans by Charles F. Hoppe, Arch., 103 Park Ave. The structure will have a frontage of 194 ft. and a depth of 84 ft., and will cost $450,000.

Henry Corn, 341 Fifth Ave., has filed plans for the 18-story offices and lofts to be built on the corner of Fifth Ave. and 17th St., the site of the original Juillard mansion. It is to be known as the Merchantile Exchange. It will be of the Renaissance type, with facades of brick, trimmings of limestone and terra cotta. Two top stories will be fashioned with arched windows and a Doric colonnade resembling a loggia, the columns supporting an ornamental cornice. Parts of the lower facade will have small balconies. The building is to cost $750,000. Maynicke & Franke, 298 Fifth Ave., are Archs.

Plans were filed with the Bureau of Buildings for a 6-story apartment to be built for the Criterion Construction Co., Samuel Matz, Pres., on 143d St., west of Broadway. It is to be of the French Renaissance type, with facades of brick, stone and terra cotta, finished with ornamental mezzanine bays, having a frontage of 75 ft. and a depth of 86.11 ft., and will contain 25 suites of apartments. It is to cost $90,000. Schwartz & Gross, 347 Fifth Ave., are Archs.

Plans have been completed for a 5-story apartment house to be built for J. B. Berry, 543 West 145th St., on a lot 25 × 86.10 ft., in the south side of 180th st., 100 ft. west of St. Nicholas Ave. Neville & Bagge, 217 West 125th St., are Archs.

NEW YORK, N. Y.—A 6-story apartment house, 25.8 × 84.4 ft., is to be built on Monroe St., east of Rutgers St., for Joseph Block, 137 West 118th St. Shampan & Shampan, 772 Broadway, Brooklyn, are Archs.

The Twentieth St. Construction Co., 143 West 20th St., will erect a 2-story brick and stone loft building at 143 West 20th St. The structure will be 45 × 87 ft., and will cost $60,000. Theodore Henry is Pres.

The Anaconda Realty & Construction Co., 8 West 39th St., will build two 6-story brick and stone apartment houses, 100 × 86.11 ft., on 136th St., east of Broadway. The buildings will cost $240,000. Schwartz & Gross, 347 Fifth Ave., are Archs.

George F. Pelham, Arch., 503 Fifth Ave., has prepared plans for a 6-story brick and stone apartment house, 132.6 × 86.2 ft., to cost $175,000. The building will be erected at 162d St., east of Broadway, by the Barkin Construction Co., 459 West 141st St.

BUFFALO, N. Y.—The H. D. Taylor Co., Conrad E. Wettlaufer, 103 Oak St., Pres., will erect a storehouse and showroom adjoining its present warehouse at Oak and North Division Sts.

FULTON, N. Y.—The Lee Memorial Hospital Association will erect a 1½-story brick hospital building, 125 × 40 ft. Plans are being prepared by R. W. Gibson, Arch., 103 Terminal Bldg., New York, who will receive bids.

ROCHESTER, N. Y.—A main building will be built at the Rochester City Hospital. The Trustees will use a gift of $400,000 from George Eastman.

PITTSBURG, PA.—J. L. Beatty, Arch., 146 Sixth St., Pittsburg, is taking estimates for a 4 and 6-story hospital, 320 × 275 ft., to be built for the West Penn Hospital Association. Cost, $200,000.

PHILADELPHIA, PA.—Plans for the proposed $90,000 apartment house, to be erected at Chestnut and 44th Sts., have been completed by E. Allen Wilson, Arch., and estimates have been invited by the Real Estate Bonding Co., 43d and Chestnut Sts., Philadelphia. The building will measure 150 × 80 ft., will be four stories high, built of ornamental brick with terra cotta and limestone trimmings. It will contain 24 flats of eight rooms each. It will have electric lighting and hot water heating. The interior will be finished in oak, birch, chestnut and enameled woodwork. It will be provided with a roof garden.

The John D. Allen Co., Betz Bldg., has prepared plans for a 5-story hospital for the American Oncologic Hospital. Cost, $100,000.

PHILADELPHIA, PA.—England, Walton & Co., Inc., 260 North Third St., will build a 5-story warehouse, 120 × 165 ft., to cost $100,000. D. K. Boyd, Harrison Bldg., is Arch.

CRAMP & CO. will begin work in a few days on a concrete school building to be erected in this city. The building will stand at 23d and Cambria Sts. It will be three stories in height, 90 × 180 ft., and will contain 27 class rooms. Cost, $185,000.

FORT DU PONT (Delaware City post-office), DEL.—Bids are asked until 11 a. m., Feb. 15, by the Constructing Quartermaster, Fort Du Pont, for construction of quarters for two N. C. officers (including plumbing, heating and electric wiring and fixtures) at Fort Du Pont, Del.

BALTIMORE, MD.—The Architectural Commission has selected architects to prepare plans for proposed city buildings, as follows:

Schools.—Reisterstown Road and Fifth Ave., Otto G. Simonson, $125,000; Carroll and Windemere Aves., Baldwin & Pennington, Professional Bldg., $107,000; Mulberry and Payson Sts., Theodore Wells Pietsch, American Bldg., $120,000; addition to the Western High School, Wyatt & Nolting, Keyser Bldg., $107,000; addition to school on Retreat St., Archer & Allen, Savings Bank Bldg., $18,000.

Engine and Truck Houses.—Paca and Fayette Sts., G. Edward Laferty, 11 East Pleasant St., $20,000; Gorsuch Ave., Charles M. Anderson, $24,000; Caroline St. and Eastern Ave., Cassell & Sons, Law Bldg., $25,000; Edmonson Ave. and Bentalou St., Ellicott & Emmart, Union Trust Bldg., $24,000; Russell and West Sts., Paul Emmart, $24,000; addition to No. 1 Truckhouse, Gay St., near Baltimore St., plan already prepared, $25,000.

Miscellaneous.—Pipe line station building, D. B. Banks, Engr.-in-Charge, $50,000; hospital building at Bayview, Parker, Thomas & Rice, Union Trust Bldg., $150,000.

At present the city is negotiating the purchase of more lots upon which are to be erected school and engine houses. It is believed that the plans and specifications for the buildings will be ready within the next month. Edward D. Preston, 1637 Edmondson Ave., is Inspector of Bldgs.

WHEELING, W. VA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Feb. 16, for alterations to the 12th St. entrance at the U. S. post-office, court-house and custom-house building at Wheeling, W. Va.

*ATLANTA, GA.—Bids are asked until 3 p. m., March 8, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the installation of the low pressure steam heating and ventilating apparatus, etc., for the U. S. post-office, court-house, etc., building at Atlanta.

ATLANTA, GA.—Bids are asked until 3 p. m., March 2, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the installation of a conduit and electric wiring system for the U. S. post-office and court-house building at Atlanta, Ga.

JACKSONVILLE, FLA.—We are officialily advised that the TURNER CONSTRUCTION CO., 11 Broadway, New York, N. Y., have been awarded the general contract for the construction of a reinforced concrete garage for Fred. E. Gilbert. This building will be erected at the corner of Church and Laura Sts., Jacksonville. The plans call for a 5-story and basement building, 102 × 102 ft., of reinforced concrete throughout. Work will be undertaken soon.

GADSDEN, ALA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., March 1, for constructing (complete) the U. S. post-office at Gadsden.

JOHNSON CITY, TENN.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Johnson City, Tenn., to M. P. WELLS, Witherspoon Bldg., Philadelphia, Pa., at $59,409. Time, Jan. 1, 1910. Noted on Jan. 14.

NASHVILLE, TENN.—Mowbray & Uffinger, Archs., 92 Liberty St., New York, advise us that bids were received by the Union Bank & Trust Co. on Jan. 20 for constructing a 5-story marble bank and office building for the Union Bank & Trust Co., Nashville. The general contract has been let to the EDGEFIELD & NASHVILLE MFG. CO., at about $130,000.

READING, OHIO.—Bids are asked until noon, Feb. 6, by Lewis M. Comer, Secy. Bldg. Com., Sycamore Aerie No. 1,095, F. O. E., for erection of Eagle's Hall, to be built according to plans and specifications on file in the office of Garber & Woodward, Archs., 907 Andrews Bldg., Cincinnati, Ohio.

CLEVELAND, OHIO.—F. S. Barnum, Arch., Bd. of Education, has prepared plans for a 3-story school for the Board of Education. Charles Orr, Dir. Cost, $100,000.

WARREN, OHIO.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Warren, Ohio, to the DUROLITHIC CO., 400 Ellicott Sq., Buffalo, N. Y., at $49,274. Time, Feb. 1, 1910. A complete list of bids was given on Jan. 14.

YOUNGSTOWN, OHIO.—Bids are asked until 11 a. m., Feb. 16, at the office of the County Auditor, Youngstown, for constructing the proposed Mahoning County jail at Youngstown. The building will have two wings, the front wing to be three and the rear five stories high. The building will be fireproof, 123 × 50 ft. Owsley, Boucherle & Co., Maloney Block, Youngstown, are Archs. W. H. Ruhlman is Chn. Mahoning County Bldg. Comn. Noted last week.

HARRISBURG, IND.—The Town Board will receive bids for the construction of a city hall building. Work is to begin in the spring.

INDIANAPOLIS, IND.—Steps have been taken toward erection of a children's hospital in this city. Estimated cost, $300,000. Frank Vancamp is Pres. of Association.

The Indiana Legislature will appropriate $150,000, it is stated, for the construction of an executive mansion in this city. Work to commence this year. Thomas R. Marshall is Governor, Indianapolis. This item was erroneously reported under Fort Wayne last week.

BLOOMINGTON, IND.—We are officially advised that bids were received by the Central Methodist Episcopal Church on Jan. 28 for construction of a church building to cost from $60,000 to $65,000. William H. Adams is interested. The bids have been rejected as being too high. The plans will be changed and new bids taken at once.

GRAND RAPIDS, MICH.—The St. Mary's Hospital Association will erect a 5-story hospital building, 50 × 103 ft., to cost $60,000. C. G. Vierheilig, Houseman Bldg., is Arch.

DETROIT, MICH.—Stratton & Baldwin, Arch., Union Trust Bldg., have prepared plans for a 6-story hospital, to cost $600,000. There will be a main building and four wings, and will be erected by the Trustees of the Harper Hospital.

PEORIA, ILL.—Bids are asked until Feb. 15 by Herbert E. Hewitt, Main St., Arch., for a 1-story Shriners' Temple, 171 × 98 ft., on Monroe St. It will be of press brick with terra cotta trimmings and will cost $100,000.

CHICAGO, ILL.—The erection of a dormitory to cost $100,000 has been authorized by the Board of Trustees of the Chicago Y. M. C. A. The building is to be erected at Wilson and North Hermitage Aves. in connection with the Wilson Ave. branch.

The Chicago School Board has made public its plans to erect within the next two or three years 46 school buildings and additions, at a total cost of $8,873,000. Thirteen elementary schools are to be provided with gymnasiums and baths. Manual training and domestic science departments, libraries, and other features are to be a part of the plan.

Holabird & Roche, Archs., Monadnock Bldg., have prepared plans for an addition to the Wesley Hospital, to cost $100,000. Perley Lowe is Pres. Bd. of Trustees.

MILWAUKEE, WIS.—The competitive plans of Brust & Phillipp, Archs., 401 Camp Bldg., were accepted for the Juvenile Court and Detention Home building. The structure will cost $75,000. Betts & Hosmer, Haralson Bleckley and Armstrong & DeGelleke were awarded the cash prizes of $300, $200 and $1,000, respectively.

DODGE CITY, KAN.—Bids are asked by the Secretary of Agriculture, Washington, D. C., until noon, Feb. 23, for the erection of a 2-story and cellar brick building for the Weather Bureau, U. S. Dept. of Agriculture, at Dodge City.

LEAVENWORTH, KAN.—The following bids were received on Jan. 25 by the Superintendent of Prisons and Prisoners, Dept. of Justice, Washington, D. C., for furnishing steel trusses at the U. S. penitentiary, Leavenworth, Kan.: Penn Bridge Co., Washington, D. C., $33,987; Jones & Laughlin Steel Co., Philadelphia, Pa., $53,700; Snead Architectural Iron Works, Louisville, Ky., $64,539; Midland Bridge Co., Kansas City, Mo., $55,695; Mesker & Co., St. Louis, Mo., $37,600; Capital Iron Works, Topeka, Kan., $37,380; Union Iron Works, Cincinnati, Ohio, $38,242; Fisher Machine Works, Leavenworth, Kan., $42,365; Leavenworth Bridge Co., Leavenworth, Kan., $39,744; New Jersey Foundry & Machine Co., New York, $37,315; Hoisting Machinery Co., New York, $42,000; American Bridge Co., Baltimore, Md., $37,600; A. Bolter Sons, Chicago, Ill., $36,304; Hamilton & Chambers, New York, $47,900; G. & W. Mfg. Co., New York, $53,900; Kansas City Structural Steel Co., Kansas City, Mo., $36,900; Phoenix Iron Co., Baltimore, Md., $35,910; A. H. Haig, Philadelphia, Pa., $36,000; Champion Iron Co., Canton, Ohio, $51,680; Missouri Valley Bridge & Iron Co., Leavenworth, Kan., $35,933.

LINCOLN, NEB.—The International Harvester Co. of America, Chicago, Ill., will erect a 3-story warehouse, 112 × 125 ft., to cost $60,000. W. D. Price, of Chicago, is Arch.

HOT SPRINGS S. DAK.—Bids are asked by W. A. Tucker, Treas., Battle Mountain Sanitarium, N. H. D. V. S., until noon, Feb. 25, for constructing a tuberculosis ward.

ST. LOUIS, MO.—Plans have been drawn for a building for Grand Ave. and Olive Sts., which will resemble in features the Coliseum, and will cost $500,000. It will occupy a frontage of 400 ft. on Olive St. by a depth of 125 ft. The site, which is the property of the Hardy estate, of Philadelphia, Pa., begins 50 ft. west of Grand Ave. The building will be eight stories high, fireproof, and will be constructed of steel and concrete. The first floor will be occupied by a market. A bowling alley and cafe will occupy the basement. The upper floors will contain a theater, ballroom and lodge halls. Construction will be begun as soon as the details of a lease of the site with the Hardy estate can be arranged.

FORT SMITH, ARK.—The First National Bank has awarded the general contract to the JAMES BLACK MASONRY & CONSTRUCTION CO., Wright Bldg., it is stated, for erecting an 8-story bank and office building, 75 × 120 ft. Cost, $250,000. F. A. Handlin, Ft. Smith, is Pres.

FAYETTEVILLE, ARK.—Bids were received as follows on Feb. 1 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Fayetteville, Ark.: Algernon Blair, Montgomery, Ala., $60,700; Dieter & Wenzel Construction Co., Wichita, Kan., $64,100; J. A. Daly, Nevada, Mo., $57,600; L. R. Wright, Dallas, Tex., $70,000; Northern Construction Co., Milwaukee, Wis., $69,000; M. S. Hasle Construction Co., Dallas, Tex., $59,125. Time, April 1, 1910.

COLORADO SPRINGS, COLO.—James F. Burns has plans ready for construction of a $200,000 opera house, office and store building, combined, on his property, 120 × 180 ft. The building will be three stories high and ornate in design. The Durkee Building, a 3-story pressed brick structure now on the site, will be remodeled to conform with the new part, the opera house, which will replace 1-story buildings adjoining. There will be four stores, two on each side of the opera house entrance, which will be in the form of a vestibule 20 ft. wide by 50 ft. deep. The third floor will contain offices. The opera house proper, which will be in the rear of the site, will be about 90 × 120 ft. and will seat 1,200 to 1,500 people.

DENVER, COLO.—Baerresen Bros., Archs., Mack Bldg., are preparing plans for a $60,000 3-story business block which M. J. and H. H. Post will erect on Broadway, between 13th and 14th Aves.

A 5-story hotel with 80 rooms will be built here for Mrs. A. W. Jacobson. It will cost $60,000. Richard Phillips, Jacobson Block, Denver, is Arch.

ABILENE, TEX.—Bids are asked by the Secretary of Agriculture, Washington, D. C., until noon, Feb. 23, for the erection of a 2-story and cellar brick building for the Weather Bureau, U. S. Dept. of Agriculture, at Abilene.

GALVESTON, TEX.—Contract for a passenger depot to be erected here by the Gulf & Interstate Ry. of Texas has been awarded to JANSEN & ZEMPTER. The station will be a temporary one to be used until an entrance is effected into the Union station. As soon as the temporary structure is up Gulf & Interstate trains will be brought across the bay in barges and trains run directly into the station. J. R. Dillon, Galveston, is Gen. Mgr.

SEATTLE, WASH.—We are officially advised that the general contract for constructing a 7-story office building for the Metropolitan Building Co., Seattle, has been let to the STONE & WEBSTER ENGINEERING CORPORATION, 147 Milk St., Boston, Mass. The building will be built of brick, stone and terra cotta, and will cost about $350,000. It will be erected adjacent to a similar building built by the same owners last year at Fourth Ave. and Union St., and noted on April 2. Howells & Stokes, 100 William St., New York, N. Y., are Archs.

PATTON, CAL.—Bids are asked by the Board of Managers of the Southern California State Hospital, at the Secretary's office, Redlands, Cal., until 8 p. m., Feb. 15, for the erection of a receiving building at the Southern California State Hospital, at Patton, Cal. Lyman M. King is Secy.

SAN BERNARDINO, CAL.—Bids are asked by the Board of Education of San Bernardino until 7.30 p. m., Feb. 16, for construction of a technical school building, according to plans and specifications which may be seen at the office of F. S. Allen, Arch., 712 Security Bldg., Los Angeles, Cal., and at the Parker Machine Works, San Bernardino. F. W. Conrad is Clerk.

LOS ANGELES, CAL.—Notice is given that the Board of Supervisors of Los Angeles County will sell at 10 a. m., Feb. 23, at the County Court House, in the City of Los Angeles, at public auction to the highest bidder, for cash, the old county jail building, now located on the county court-house grounds, not including the boiler-room, and also all those buildings located on the land recently condemned by the County of Los Angeles, adjoining the court-house grounds on the south, being the building known as Nos. 214, 216, 216½ and 218 North Broadway, and Nos. 215 and 219 New High St. Hudson & Munsell, Stimson Bldg., are Archs.

Bids are asked by the Board of Supervisors of Los Angeles County, Cal., until 2 p. m., Feb. 23, for the construction of a building to be used as a hall of records and county office buildings. Hudson & Munsell, Stimson Bldg., are Archs.; C. G. Keyes is County Clerk.

SAN FRANCISCO, CAL.—We are officially advised that the Receivers of MILLIKEN BROS., 11 Broadway, New York, N. Y., have been awarded contract for the structural steel to be used in construction of an office building for George H. Fitch. W. J. Miller, 45 Kearney St., San Francisco, is Arch.

The Crane Co., Chicago, Ill., has awarded general contract to LEWIS A. HICKS CO., Humboldt Bank Bldg., San Francisco, Cal., for constructing a 7-story warehouse, 84 × 160 ft. The contract for structural steel has been let to the Receivers of MILLIKEN BROS., 11 Broadway, New York, N. Y. Lewis P. Hobart, Crocker Bldg., San Francisco, is Arch.

Dr. Clyde S. Payne will erect a 3-section apartment building designed by W. G. Hind, Arch., Humboldt Bank Bldg., at the northwest corner of Jackson and Leavenworth Sts. The corner building will contain 15 apartments of three rooms each, the other two will have 20 apartments each of two and three rooms and bath. All will be four stories high. The total investment will be approximately $100,000.

RIVERSIDE, CAL.—J. C. STANLEY, of Riverside has secured the contract to build the proposed Y. M. C. A. building, to be erected on the corner of Eighth and Lemon Sts., from plans prepared by Arthur B. Benton, Arch., 114 North Spring St., Los Angeles, Cal. It will be Mission in design, and will contain gymnasium, swimming pool, auditorium, boys' apartments, class and committee rooms, dormitories, reading-room and roof garden. The total cost of the structure will be about $55,000.

SAN FRANCISCO, CAL.—Plans are under way for a 7 or 8-story Class A State office building to be built at the corner of Fulton and Polk Sts., San Francisco. Plans will be figured some time this spring. The building will house the Supreme Court, the Appellate Court, the Attorney-General, and all State officials now occupying hired offices in the city. Cost estimated at $400,000.

*TIBURON, CAL.—Bids are asked by William S. Cowles, Ch. of Bureau of Equipment, Navy Dept., Washington, D. C., until 11 a. m., March 1, for constructing and erecting a coal shed at the U. S. Naval Coal Depot, California City Point, Tiburon, Cal.

MONTREAL, QUE.—The estimated cost of the proposed club-house to be erected by the M. A. A. A. is stated to be $50,000.

WOODSTOCK, ONT.—Plans, estimates, etc., will be received until Feb. 20 by Henry A. Philips, Secy. Bd. Com., of the municipality of Carleton, for the buil[illegible] of a brick court-house in the town of Wo[illegible]k during the summer of 1909.

WINNIPEG, MAN.—J. H. G. [illegible]ell, Sylvester-Willson Bldg., is prepar[illegible] plans for a 12-story stone and steel o[illegible] building for J. D. McArthur.

SASKATOON, SASK.—Plans [illegible] been completed in Chicago for huge [illegible]ouse to be erected here for the Intern[illegible] Harvester Co., of Chicago.

CALGARY, ALTA.—The Intern[illegible] Harvester Co., of Chicago, Ill., [illegible]ees & Perse will erect warehouses [illegible] the spring.

The City Council has voted [illegible]00 for improvements and additions to th[illegible] city hall.

VANCOUVER, B. C.—The contr[illegible] for the steel in the construction of th[illegible]story office building to be erected at [illegible] corner of Hastings and Cambie Sts., by [illegible]minion Trust Co., has been award[illegible] the DOMINION BRIDGE CO., of Mont[illegible] Que.

WATER SUPPLY—IRRIGA[illegible]ON.

PROVIDENCE, R. I.—The Wa[illegible] Board has awarded the contract to R. [illegible]OOD & CO., 400 Chestnut St., Philadel[illegible] Pa., for furnishing water-pipe at $22.5[illegible] per net ton. Other bidders were: Warren [illegible]undry Co., New York, $23; Allen & R[illegible] Inc., $23.95; Lynchburg Foundry Co., $2[illegible] for 10 and 12-in. pipe, $24.70 for 6 and 8-in. pipe; United States Cast-Iron Pipe & Foundry Co., $24.30; Donaldson Iron Co., $24.13 for 10 and 12-in. pipe; Charles Miller & Son, $25,965. Walter F. Slade is Comr. Pub. Wks.

HARTFORD, CONN.—Allen Hazen, 103 Park Ave., New York, has completed and presented to the Board of Water Commissioners his report on an increased water supply for Hartford. He recommends taking the water from Nepaug River and Phelps Brook, and the immediate construction of works to utilize water from this source.

The Water Commissioners on Jan. 29 voted to lay a 30-in. main this season in Main St., from Park to Arch Sts.

FORT MICHIE (New London, Conn., post-office), N. Y.—We are officially advised that bids were received as follows on Jan. 30 by the Constructing Q. M., U. S. A., for constructing an addition to the pumping plant at Fort Michie and installing machinery in same: Walworth Mfg. Co., 134 Federal St., Boston, Mass., $4,955; G. & W. Mfg. Co., 26 Cortlandt St., New York, $6,100. Capt. Charles T. Baker is Q. M., U. S. A.

RENSSELAER, N. Y.—The Rensselaer Water Co. is considering preparing plans for a reservoir, to be constructed in the spring.

ATLANTIC CITY, N. J.—The Water Commissioners are considering the construction of a 40-in. water main across the meadows, between Pleasantville and Atlantic City. J. W. Hackney is City Engr.

*BEAVER, PA.—Bids are asked until 8 p. m., Feb. 9, by the Town Council for constructing an addition to the pumping station and installing a 1,000,000-gallon triplex pump and gas engine to operate same. George R. Bovard is Secy.

PITTSBURG, PA.—The Bureau of Water has awarded to the PITTSBURG VALVE FOUNDRY & CONSTRUCTION CO., 26th St., the contract for furnishing all valves, gates, etc., required in the extension and repair of the city water lines for a period of one year from Feb. 1, 1909.

NEW BRIGHTON, PA.—The New Brighton Water Co., Harry Chandley, Gen. Supt., will make a number of additions and changes at the pumping station on First Ave., this borough. The pumping capacity is to be added to and the power-house capacity increased.

RICHMOND, VA.—We are officially advised that bids were received on Jan. 29 by the Council Committee on Water for construction of a flume from the settling basin to the pump-house. Bids had been invited on metal, wood and concrete construction, each bidder to furnish his own plans and specifications. Following is the list of bids submitted:

Javi Perkins and John C. Weinburn, to erect a reinforced brick flume on base of present flume, $73,610. If riprapped, add $5,000. Time, 250 working days. Diameter, 54 ins.

Maynard & Ford, to construct a waterproofed brick lining to present flume, $82,082. Interior diameter, 48 ins.

O'Dallam O'Brien, Wilmington, N. C., lining present conduit with ¼-in. steel sheets, $82,237. Designs No. 2, for same character of work, $98,112. Offer No. 3, to furnish labor and material at cost, and to do the work on a commission of 17½% of cost. Interior diameter of steel lining approximately 50 ins.

Piedmont Construction Co., reinforced concrete flume, to be completed in 250 working days, in the following sizes: 48-in., $52,500; 54-in., $56,000; 60-in., $61,500; 66-in., $72,000.

Thomas A. Barry & Co., reinforced concrete flume, diameter 48 ins., $74,300. Add, if waterproofed, $5,500. If extra reinforcement required, add 20 cts. a lin. ft. Second offer—Cast-iron pipe, 48-in. diameter, $114,379.

McCay Engineering Co., five offers: 48-in. steel riveted conduit, $47,770; 48-in. wood reinforced conduit, $46,400; 54-in. steel riveted conduit, $53,770; 60-in. steel riveted conduit, $59,877; 48-in. cast-iron pipe, $69,900.

MacArthur Bros., 11 Pine St., New York, five offers: Reinforced-concrete flume, on present general lines, $95,625; 48-in. cast-iron pipe, at $20 a ft., approximately $100,000; 60-in. cast-iron pipe, at $25 a ft., approximately $125,000; 48-in. steel pipe, at $13 a ft., approximately $65,000; 60-in. steel pipe, at $19 a ft., approximately $95,000; 54-in. steel pipe, at $15 a ft., $75,000.

Stamper Bros. & Ragland: 50-in. wood flume, $48,500.

Warner F. Brenizer & Co., of Washington,

D. C.: Reinforced-concrete flume, on same general lines as at present, $49,000.

Pinney & Dickey, of Covington, Va.: Reinforced-concrete flume, according to drawings filed, egg shape, $61,231.

Mulay & Co.: 5-ft. reinforced-concrete conduit, $68,000 and $71,000, two drawings and formulas being submitted.

C. W. Lambert, five propositions: 5-ft. reinforced-concrete flume, $75,000; 4-ft. lock joint concrete pipe line, $43,500; 5-ft. steel riveted pipe, $52,500; three parallel terra cotta pipes of vitrified clay, $55,000; 5-ft. double lock brick conduit, $38,000.

I. J. Smith & Co.: To lay in present flume a lock joint pipe line, 4 ft. diameter, with single reinforcement, $46,925; with double reinforcement, $51,925; approximate diameter, 4 ft. Second offer: 48-in. steel pipe line, $51,000; 52-in. steel pipe line, $53,-[illegible]. Third offer: Monolithic reinforced-concrete flume of the Henribuque system, 4 ft. 4 in. in diameter, $43,780.

Atlantic Dredging Co.: Cover and reinforce present flume, $64,512; 48-in. cast-iron pipe, $[illegible],478; or percentage basis.

Phillips & Allport: To reinforce present flume with concrete and steel rods, $75,000, or would undertake to put flume in order on 10% basis; estimated cost, $68,000; no money to be paid out until flume is complete and has been tested.

C. P. E. Burgwyn made no bid under the terms called for, but presented to the committee a letter renewing his offer to do the work on a percentage basis as the city's executive officer. His proposition was tabled for the present, as not being in the class with other bids, and not, therefore, proper for consideration in a competition. The committee has the right to reject any and all bids and to receive additional proposals. The Burgwyn offer in brief proposes to build a 7-ft. reinforced-concrete flume, furnishing his own designs, engineers, inspectors, employing all labor and purchasing material, dividing with the city any saving made under $75,000. Alternate propositions are submitted for a 6-ft. flume, dividing with the city the saving under $66,-000, and a 5-ft. flume, dividing the amount saved under $59,000. Eugene E. Davis is Supt. Water-Works.

ASHBURN, GA.—The city has voted $55,-000 of water-works, electric-light and school bonds.

FAUNSDALE, ALA.—The city contemplates installing water-works and electric-light plant. Siddons Stollenwerck is Town Clk.

ITTABENA, MISS.—Bids will be received until Feb. 15 by the Town Council for furnishing material and constructing a water-works and sewer system here. Xavier A. Kramer is Consulting Engr., Magnolia, Miss.

RUSTON, LA.—The city has sold $33,000 of water and electric-light bonds.

MOUNT PLEASANT, TENN.—The city is considering issuance of $150,000 of bonds for the construction of water-works, sewerage system and electric-light plant.

ERWIN, TENN.—The Erwin Water Co. has been incorporated with $10,000 capital stock by A. R. Brown, J. F. Toney, Benjamin F. Bogart and others.

PUT-IN-BAY, OHIO.—Bids will probably be asked for about April 1 for the construction of water-works. Estimated cost, about $7,000. C. E. De Witt, of Port Clinton, is Engr.

COLLEGE HILL (Cincinnati post-office), OHIO.—We are officially advised that College Hill has under consideration furnishing a water supply to the adjacent town of Mount Healthy. George Hornung & Son, Consult. Engrs., Johnston Bldg., Cincinnati, have been employed to report on the feasibility of the scheme, which may involve the installation of additional pumping machinery.

CINCINNATI, OHIO.—Bids will be received by the Board of Public Service until noon, Feb. 12, for furnishing the necessary labor and materials for the laying of pipe, special castings and valves, and other miscellaneous work in connection therewith, for the water distribution system of the city during the year 1909. John J. Wenner is Clk. Bd.

TOLEDO, OHIO.—A committee has been appointed to look into the matter of the construction of high-pressure mains and a pumping station for the same. The matter has been referred to the Water-works Department and Fire Department to report upon the location and cost of the improvement. F. J. Consaul is Ch. Engr. Bd. Pub. Ser.

CINCINNATI, OHIO.—The Council on Jan. 18 passed an ordinance authorizing the Board of Public Service to award contract for laying water pipe. Estimated cost, about $30,000.

ELKHART, IND.—Bids are asked by the Board of Public Works until 10 a. m., Feb. 17, for supplying the city and inhabitants with water for all domestic purposes and public uses including fire protection for a period of 25 years from April 28, 1909.

SAGINAW, MICH.—George C. Whipple, of Hazen & Whipple, 103 Park Ave., New York, has completed and presented to the Citizens' Water Committee his report on the present and future water supply of the city. He recommends the Titabawassee River as the ultimate source of the city's water supply, the construction of a mechanical filtration plant, estimated cost about $281,200, and the abandonment of the West Side pumping station and the consolidation of the two pumping plants on the east side of the river, with adequate mains across the river to supply the west side.

ROCK ISLAND, ILL.—Bids will probably be asked about March 1 for the construction of mechanical filter plant. Wallace Treichler is City Engr. J. W. Cavanagh is Supt. Water-Wks.

BLOOMINGTON, ILL.—Contracts will soon be let for furnishing and laying 4,707 ft. of 6-in. c.-i. water pipe and eleven hydrants. C. F. Founts is City Engr.

ALTON, ILL.—The Alton Water Co. is considering expending about $70,000 in improvements, including the construction of a standpipe, extension of mains and a new pump.

*ROCK ISLAND, ILL.—Bids are asked until 5 p. m., March 1, by the city for the construction of a complete mechanical filtration plant. Bidders must furnish detailed plans and specifications. M. T. Rodgren is City Clk.

SPARTA, WIS.—The Water Commission proposes to erect a water tower here. Estimated cost, about $3,500. H. Teasdale is Pres. Comn.

MINNEAPOLIS, MINN.—We are officially advised that the City Council on Jan. 29 awarded the following contracts: To the MASSILLON IRON & STEEL CO., Massillon, Ohio, for 1,784 tons of 2,000 lbs. of 6 to 24-in. c.-i. pipe, at $25.85 per ton, f. o. b. Minneapolis; to the CROWN IRON WORKS, Minneapolis, Minn., 125 tons of special castings at $48; to the CAMDEN IRON WORKS, Camden, N. J., 100 D. S. fire-hydrants with frost cases, at $41.75 each; to the RENSSELAER MFG. CO., Troy, N. Y., 100 6-in. at $11.30; 15 8-in., $17; twelve 12-in., 31.75, and two 24-in. gate valves, $192 each.

LINCOLN, NEB.—Plans and specifications are being prepared for a 1,000,000-gallon reinforced-concrete reservoir. William Grant is City Engr.

GRAND FORKS, N. DAK.—The contract for constructing an addition to the settling basin, bids opened on Jan. 4, has been awarded to DINNIE BROS., of Grand Forks, at $4,347. W. H. Alexander is City Audr.

MARSHALL, MO.—The city contemplates issuing bonds to perfect the system of water-works now being constructed.

DALLAS, TEX.—The City Commission will construct a 36 or 42-in. c.-i. conduit to replace the present wooden conduit. Bids will be asked on both sizes. Estimated cost, $28,000 and $37,000. J. M. Bassett is Ch. Engr. W.-Wks.

DENISON, TEX.—The citizens on Jan. 29 voted in favor of issuing $50,000 of bonds for the construction of an additional reservoir and extending the water mains. Alexander W. Acheson is Mayor.

MIDLAND, TEX.—The city has awarded the contract to the O'NEIL ENGINEERING CO., Dallas, Tex., for the construction of the proposed system of water-works and sewers. Estimated cost, $100,000.

ENNIS, TEX.—The citizens on Jan. 19 voted in favor of issuing $13,000 of bonds for the construction of water-works.

*HASKELL, TEX.—Bids will be received by the Mayor and City Council until Feb. 15, for the purchase by the city of all material necessary in the construction of a system of water-works and sewers which will include return tubular boilers, duplex pumps, boiler feed pumps, heaters, c.-i. pipe, hydrants and valves; also standard vitrified salt glazed sewer tile and fittings, manholes, frames and covers.

DENVER, COLO.—The Henrylyn Irrigation District on Jan. 16 awarded the contract for the construction of three reservoirs and about 125 miles of canals and laterals to water 125,000 acres of land to the S. R. H. ROBINSON & SON CONTRACTING CO., Chemical Bldg., St. Louis, Mo., at $3,296,-000. The work is to be completed by April 1, 1910.

GRANITE, COLO.—Bids are asked by George A. Kilgore, Secy., Otero Irrigation District, La Junta, Colo., until 11 a. m., Feb. 8, for the completion of a reservoir embankment at Clear Creek, near Granite Chaffee County. George G. Anderson is Engr., Equitable Bldg., Denver, Colo.

MABTON, WASH.—Bids will be received until 10 a. m., Feb. 23, by the city for the construction of a water-works system. W. H. Ashton is Town Clk.

GRANGER, WASH.—The Washington Irrigation Co. is preparing to begin the construction of a large lateral and inverted syphon to place water on a tract of land adjoining the township, for irrigation purposes.

NORTH YAKIMA, WASH.—The North Yakima & East Selah Irrigation Co. contemplates constructing a water power pumping plant of 3,000 HP. to raise water for irrigation purposes. Clark O'Bryan is Pres., Alaska Bldg., Seattle, Wash.

SEATTLE, WASH.—Bids were received as follows on Jan. 22 by the Board of Public Works for laying water mains in Lakeside Ave.: C. W. Cort, Seattle, $10,047; Sparger Concrete Co., Seattle, $12,075; International Contract Co., Seattle, $10,201; S. V. Gifford, $10,965; E. T. Smart & Co., $10,-149; Elliott Bay Iron Works, $10,400. Contract will probably be awarded to C. W. Cort.

SEATTLE, WASH.—R. H. Thomson, City Engr., has estimated the cost of the following street improvements: Rainier Ave. and other streets, water mains, $7,300; 32d Ave., N. W., and other streets, water mains, $4,600.

LA GRANDE, ORE.—The city on Jan. 21 awarded the contract to the AMERICAN LIGHT & POWER CO., Scarritt Bldg., Kansas City, Mo., for the construction of a water system, the water to be brought from Beaver Creek, 18 miles away, to the reservoir with a 300-ft. head. Estimated cost, $160,000.

VALLEJO, CAL.—The Board of Public Works on Jan. 18 decided in favor of constructing an additional distributing reservoir of 15,000,000 gallons capacity on Fleming hill.

MIDWAY, UTAH.—The Midland Land & Irrigation Co., of Midway, has been incorporated, with a capital stock of $15,000, by James B. Wilson, Henry T. Coleman, Thomas Hare and others.

WINNIPEG, MAN.—The city has decided to lay water-mains in various streets. Estimated cost, $87,000. H. N. Ruttan is City Engr.

WINNIPEG, MAN.—See item under Streets and Roads.

*SASKATOON, SASK.—Bids will be received by the City Clerk until 8 p. m., on Feb. 24, for furnishing and erecting one pumping engine with a capacity of 1,200 to 1,500 U. S. gallons per min. Willis Chipman, C. E., is Ch. Engr., 103 Bay St., Toronto, Ont.

SEWERAGE.

BEVERLY, MASS.—The Board of Aldermen have passed an ordinance providing for the construction of sewers in the Second and Fourth Wards. H. L. Whitney is City Engr.

GARDNER, MASS.—The Sewer Commissioners are planning the construction of additional sewer beds here. Estimated cost, between $20,000 and $30,000.

BOSTON, MASS.—We are officially advised that contracts were awarded on Jan. 21 by Guy C. Emerson, Supt. of Streets, for cleaning catch basins in the following districts: South Boston, about 900 basins, to P. J. Allen, at $1.16 per cu. yd.; Dorchester, about 1,000 basins, same, at 85 cts.; East Boston, about 400 basins, to J. H. FURGESON, at $1.38; Charleston, about 500 basins, to A. CEFALO, at $1.29; districts Nos. 9 and 10, about 1,000 basins, same, at $1.24; Brighton, about 700 basins, to J. McGREEVEY, at $1; West Roxbury, about 800 basins, same, at $1; district No. 8, same, at $1.14.

SYRACUSE, N. Y.—The lowest bid opened on Jan. 18 by the Board of Contract and Supply for the construction of the Elmwood sewer system was submitted by Frank S. Sposato, at $17,086. Other bidders were: Sullivan & Davin, $17,955; Albert Gaffey, $17,987; Samuel Bonn, $18,827; John Young, $19,719; C. T. Hookway, $20,010; P. R. Kieley, $20,765; John W. Bustin, $21,257; Nick Marnell, $21,952; James Swift, $22,-619.

NEWBURGH, N. Y.—The Street Committee of Council opened bids on Jan. 19 for laying a 12-in. sewer in Elm St. and City Terrace. P. & J. O'Rourke were the low bidders, at 94 cts. a lin. ft. for earth and $1.45 per cu. yd. for rock. Other bidders were: A. Spino, Fishkill, 94 cts. and $2.50; W. J. Murphy, $1.44 per lin. ft. and $1 extra for rock; J. H. Murphy, $1.19 per lin. ft., and $1.44 extra for rock. Recommendation was made to Council to award the contract to P. & J. O'Rourke.

COHOES, N. Y.—The Board of Affairs on Jan. 21 awarded the contract for the construction of sewers in the Seventh Ward to R. T. MARTIN, at $5,919. Other bidders were: Cantrel Construction Co., $6,788; J. W. Curry, $5,987; C. H. and R. E. Kerr, J. W. Bumgarner, $7,011.

MEDINA, N. Y.—The Board of Trustees on Jan. 25 decided to construct a new sewer on the west side of the village. Estimated cost, $50,000.

*DANVILLE, PA.—The PITT CONSTRUCTION CO., Fulton Bldg., Pittsburg, has been awarded the contract for the construction of a sewage disposal plant at the State Hospital for the Insane here, at $52,547. Bids were opened on Jan. 14.

NEW CASTLE, PA.—A sanitary sewer will be constructed this summer from Neshannock Ave. to Garfield Ave. Estimated cost, $15,000. Bids will be asked for in about 30 days.

CHARLESTON, W. VA.—The city has awarded the contract to J. M. FERRY & SONS, of Charleston, for sewer construction here, at $22,801. Bids were opened on Jan. 21. W. A. Hogue is City Engr.

CHARLESTON, S. C.—The city is considering the issuance of from $250,000 to $300,000 of bonds for completing the sewer system. J. H. Dingle is City Engr.

EAST POINT, GA.—The contracts for the construction of sewers, bids opened on Jan. 19, have been awarded as follows: For furnishing sewer pipe, to STEVENS BROS & CO., of Stephens Pottery, Baldwin, Ga.; for all construction work on sewers, to SULLIVAN & LONG, of Bessemer, Ala. E. H. Davis, of Griffin, Ga., is Engr.

ATLANTA, GA.—Bids are asked until Feb. 15 by the city for constructing such sewers as may be authorized by the Mayor and General Council for 1909, not including such sewers as may be provided for in the proposed bond issue and also for furnishing the city with cement, sewer pipe and castings for manholes, catch basins, etc., to be used in constructing the sewers. R. M. Clayton is City Engr.

GRAYMONT (Birmingham post-office), ALA.—Bids are asked until Feb. 9 by the city for constructing 7,000 ft. of sanitary sewer mains. Milner & Brown are Engrs., Birmingham.

MOUNT PLEASANT, TENN.—The city is considering the issuance of $150,000 of bonds for the construction of a sewer system, water-works and electric-light plant.

PARK STATION (Knoxville post-office), TENN.—The contract for constructing eight sections of the sewer system here has been awarded by the city to JOHN L. O'CONNOR at $14,365. One other section was bid on, but on account of exceeding the amount of bond money, which is $15,000, it was eliminated. Bosler & Flynn, of Chattanooga, Tenn., bid for the nine sections $30,520, which was the highest bid for section work. Eight bidders made proposals to do the work on yardage basis and the highest bid was $32,018. Bosler & Flynn did not bid on yardage basis. The work will commence at once. W. C. Crozier is City Engr.

LOUISVILLE, KY.—The C. T. McCracken Co., Columbus, Ohio, and Fruin-Colnan Construction Co., Laclede Bldg., St. Louis, Mo., submitted the lowest bids for the construction of Section F of the southern outfall sewer. Estimated cost, $90,000. P. L. Atherton is Chn. Sewer Comn. Harrison P. Eddy, 14 Beacon St., Boston, Mass., is Consulting Engr.

LEXINGTON, KY.—The Board of Public Works has apportioned $5,000 for the construction of storm-water sewers.

ASHTABULA, OHIO.—Bids are asked until noon, Feb. 16, by the Board Public Service, A. J. Richardson, Clerk, for constructing 1,372 lin. ft. of 1-ft. 10-in. × 2-ft. 9-in. concrete sewer, 3,020 lin. ft. of 1-ft. 8-in. × 2-ft. 6-in. concrete sewer, 774 lin. ft. of 20-in. sewer, 2,154 lin. ft. of 15-in. sewer and 1,790 lin. ft. of 12-in. sewer.

DAYTON, OHIO.—F. J. Cellarius, City Engr., has submitted to Council estimates of sanitary sewers in part of district No. 4, east of Parrott and St. Paul Aves. and south of Newcome St., at $25,950, and also for repairs to riprap of Miami River and Wolf Creek at $6,500.

INDIANAPOLIS, IND.—See item under Streets and Roads.

ANN ARBOR, MICH.—E. W. Groves, City Engr., has completed plans for the construction of sewers in South Main St., and in the Arch St. and Thayer St. sewer districts.

YPSILANTI, MICH.—The Council on Jan. 18 decided to construct the Bell St. sewer.

PARIS, ILL.—Bids will probably be asked in February for the construction of storm sewers, mostly concrete. Estimated cost, about $12,000. W. T. Blackburn is City Engr.

BLOOMINGTON, ILL.—The contract will soon be awarded by the city for 8,193 ft. of vitrified pipe sewer, 6 to 18 ins. in diameter. C. F. Fauntz is City Engr.

CAIRO, ILL.—Bids were received as follows on Jan. 20 by the Board of Local Improvements for the construction of the sewer system: Garner & Hanes, $17,170; Reed Bros., of Belleville, $17,849; Roy L. Williams, $17,392; R. E. Gannon & Co., $18,-571.

AURORA, ILL.—Myron J. Tarble has estimated the cost of constructing sewers in the eastern portion of the city at about $60,000. There will be approximately 30,000 ft. of sewer extensions constructed.

GRUNDY CENTER, IOWA.—Bids will probably be asked in March for the construction of a sanitary sewer system. Estimated cost, between $15,000 and $18,000. E. A. Crary, of Grundy Center, is Engr.

MINNEAPOLIS, MINN.—The lowest bid for constructing sewers in Fourth and Fifth Sts., from South Grand Ave. to Maple St. was submitted on Jan. 20 to the city by Spence & Son.

MINNEAPOLIS, MINN.—Bids are asked by the city until 7.30 p. m., Feb. 12, for 2,000,000 sewer brick, 200 tons of special castings, vitrified clay pipe. H. M. Knott is City Clk.

WASHINGTON, KAN.—A sewer system will be constructed here. Plans have been approved by the Council. Estimated cost, $30,000.

BILLINGS, MONT.—E. LINDSTROM has secured the contract for constructing sewers in districts Nos. 28, 29 and 30, at $8,794.

ST. JOSEPH, MO.—Bids will be received until Feb. 12 by the City Clerk for constructing several sewers here.

BRADY, TEX.—A. L. Lewis, City Engr., is making surveys for the construction of a sewer system here.

DENTON, TEX.—Bids are asked until 2 p. m., Feb. 20, by the Joint Committee on Sewers for the construction of a system of sanitary sewers. Double proposals will be received, one for the city to furnish the vitrified sewer pipe, L's, Y's and curves, and T's, delivered f. o. b., Denton, contractors to do the remainder; and one for the above work, which is as follows: 2,320 ft. of 15-in., 2,230 ft. of 12-in., 4,265 ft. of 10-in., 4,820 ft. of 8-in., 32,800 ft. 6-in. diameter sewer pipe, with 21 manholes, 68 lamp-holes, also a 100,000 gallons a day unit of disposal plant, requiring approximately 75[illegible] cu. yds. earth excavation, 130 cu. yds. concrete, 4,000 lbs. of reinforcing steel, 500 cu. yds. screened gravel or broken rock for contact beds, an automatic apparatus for filling and emptying three beds in rotation, etc. N. Werenskiold, Dallas, Tex., is Engr.

*HASKELL, TEX.—See item under Water Supply—Irrigation.

WAGONER, OKLA.—The citizens on Jan. 15 voted in favor of constructing the proposed sewerage system. Estimated cost $35,000. M. A. Earl & Co., of Muskogee, Okla., are Engrs.

*MUSKOGEE, OKLA.—The McCORMICK CONSTRUCTING CO., St. Louis, Mo., has been awarded the contract by the city at $117,309, for constructing storm sewers in two districts and the HEMAN CONSTRUCTION CO., Fullerton Bldg., St. Louis, Mo., at $68,351, for constructing storm sewers in one district. Noted on Jan. 21. L. F. Kinsey is City Engr.

SHAWNEE, OKLA.—The METROPOLITAN ENGINNEERING & CONSTRUCTION CO., Scarritt Bldg., Kansas City, Mo., has been awarded the contract by the city for the construction of storm sewers here.

GUTHRIE, OKLA.—The contract was awarded on Jan. 21 by the City Council to W. F. POWER for constructing the main sanitary sewer in the West side from 14th to 17th Sts. in the alley between Noble and Warner Aves., a distance of 13 blocks, at $3,680.

SEATTLE, WASH.—R. H. Thomson, City Engr., has estimated the cost of the construction of sewers in the following streets: 22d Ave., N. W., and other streets, $23,130; 31st Ave., South, and other streets, $4,200; North 59th St. and other streets, $44,235; Pasadena Pl. and other streets, $5,450; 32d Ave., South, and other streets, $4,000.

MOUNTAIN VIEW, CAL.—The citizens have voted $40,000 of bonds for the construction of a sewerage system here.

ALBUQUERQUE, N. MEX.—The citizens on Jan. 19 voted to issue $290,000 of bonds for the construction of the sewerage system here.

HAMILTON, ONT.—The Sewer Committee on Jan. 20 awarded to the HAMILTON BAY IMPROVEMENT CO. the contract for pile driving in connection with the extension of the Ferguson Ave. and Catharine St. sewers, through the revetment wall, at 27 cts. per ft. The City Engineer's department was instructed to proceed with the balance of the work by day labor.

WINNIPEG, MAN.—See item under Streets and Roads.

STREETS AND ROADS.

FORT WILLIAMS (Cape Cottage post-office), ME.—Bids are asked until 10 a. m., Feb. 25, by Capt. F. J. Morrow, Constructing Q. M., U. S. A., for the construction of concrete walks at Fort Williams.

REVERE (Boston post-office), MASS.—We are officially advised that bids were received as follows on Jan. 25 by the Metropolitan Park Commission for grading Winthrop Parkway from Eliot Circle to Leverett Ave., approximately 500 cu. yds. of earth grading and 45,000 cu. yds. of filling material: William B. Munroe, Boston, $64,975; Cenedella & Co., Milford, $47,775; F. S. & A. D. Gore Corporation, Dorchester, $42,025; Albert H. & Fred H. Eichorn, Boston, $41,000; Bruno & Petitti, Boston, $40,700; B. Perini & Co., Ashland, $33,050; Auguste Saucier, South Framingham, $30,975; Charles G. Craib, Winthrop, $29,375; Coleman Bros., Boston, $26,800; Rowe Contracting Co., Melrose, $25,400; RICHMOND F. HUDSON, Melrose, Boston, $24,950 (awarded contract). John R. Rablin is Engr.

BROOKLYN, N. Y.—Bids are asked until 11 a. m., Feb. 17, by Bird S. Coler, Boro. Pres., for regulating, grading, curbing, paving with asphalt pavement on a concrete foundation various streets; also for laying sidewalks on various streets.

ALBANY, N. Y.—Frank R. Lanagan, Deputy City Engr., has completed plans and specifications for the improvement of a portion of Clinton Ave. The plans provide for brick pavement, with small parks at intervals through the center of the thoroughfare. Estimated cost, $45,000.

CORNING, N. Y.—Bids are asked until 7.30 p. m., March 4, by W. C. Sleight, Clerk, Bd. Pub. Wks., for building about one-quarter mile (3,600 sq. yds.) brick pavement with cement curbs and gutters, and also for one-quarter mile (4,300 sq. yds.) macadam pavement with cement curbs and gutters. R. H. Canfield is Supt. Pub. Wks.

SYRACUSE, N. Y.—The Board of Contract and Supply on Jan. 25 awarded contracts to F. J. BAKER for paving portions of Kirk Ave., Raynor Ave. and Kirkpatrick St. with sheet asphalt, stone curbing, at $12,944, $4,968 and $4,935, respectively.

ATLANTIC CITY, N. J.—Bids will be received until Feb. 8 by the city for 7,203 sq. yds. of 6-in. macadam, 4,407 sq. yds. of 12-in. Telford, 9,922 sq. yds. of vitrified fire clay block pavement, etc. E. D. Rightmire is City Engr.

NEW BRUNSWICK, N. J.—Ordinances have been passed by the city providing for paving portions of Albany and Wine Sts. Bids will be asked in the spring. F. C. Schneider is City Engr.

WAYNESBURG, PA.—A. ROBINSON, of Meadville, Pa., has been awarded the contract by the Waynesburg Brick & Stone Co. for supplying brick for eight miles of road to be built in the county this year. About 4,000,000 brick will be required.

PITTSBURG, PA.—Bids are asked by the City Controller until 10 a. m., Feb. 5, for grading, curbing and paving with standard sheet asphalt Fair Oaks St., from Wilkins Ave. to Murray Hill Ave., also same and blockstone Class D, South Negley Ave., from Dunmoyle Ave. to Wilkins Ave. Alexander B. Shepherd is Acting Dir. Pub. Wks.

ANNAPOLIS, MD.—We are officially advised that bids were received on Jan. 26 by the Commissioners of Anne Arundel County for grading and macadamizing about 1¼ miles of the Annapolis road. The lowest bid was that of Thomas McGluckian, Annapolis, at $10,389. H. J. Hayman is Road Engr.

ROCKVILLE, MD.—The lowest bid opened on Jan. 12 by the County Commissioners, Rockville, for constructing the Kensington Road, was submitted by the McKay Eng. Co., 9 E. Lexington St., Baltimore, at $30,940.

DENTON, MD.—Caroline County has awarded the contract to GOSLIN & MESSINGER, Federalsburg, Md., for grading and macadamizing about 1¼ miles of road between Federalsburg and Reliance. I. L. Dukes is Clk. County Comrs.

BALTIMORE, MD.—All bids for repairing sheet asphalt pavements have been rejected by the Board of Awards. B. T. Fendall, City Engr., will prepare new specifications for this work.

BALTIMORE, MD.—We are officially advised that the time for receiving bids for furnishing buff color brick or asphalt tile and block for projected improvements for park system has been extended from Feb. 3 to Feb. 10. Aprroximately 400,000 brick or asphalt tile and block or equivalent area will be purchased. J. Barry Mahool is Pres. Bd. of Awards. J. Harry Cross is Park Engr.

ELKTON, MD.—Bids are asked until noon, Feb. 10, by the County Commissioners for improving several public highways. J. H. Terrell is Clk. Comrs.

BOYDTON, VA.—Two Magisterial Districts of Mecklenburg County have voted bonds for road improvements as follows: Chase City, $60,000; Clarksville, $50,000.

CHATHAM, VA.—We are officially advised that the Supervisors of Pittsylvania County have awarded the contract to HAYMES & HAYMES, of Chatham, at $2,965 per mile, for the construction of four miles of macadam road, State to furnish convict labor and right reserved to increase number of miles to six. Bids were opened on Jan. 25. S. S. Heurt is Clk.

ASHLAND, VA.—The city is considering the paving of sidewalks with concrete. Estimated cost, about $1.20 per sq. yd.

BENWOOD, W. VA.—The city has awarded the contract to WILLIAM KOEHNLINE, Bridgeport, Ohio, for furnishing material and paving about 3,000 yds. with Empire brick. Bids were opened on Jan. 12. John Blake is Chn. Council. (Recently mentioned.)

CHARLESTON, W. VA.—The City Council has awarded the following contracts for street paving: To ATLANTIC BITULITHIC CO., Mutual Bldg., Richmond, Va., for paving Virginia, Lee, Elizabeth, Fayette, Quarrier and other streets, about 64,000 sq. yds., with bitulithic at $151,907; to DANIEL TRAPP, Newport, Ky., for paving Bigley Ave., Truslow, Bullitt and other streets with brick, Logan block, at $48,053; to PFAFF & SMITH, for paving Donally, Fry and other streets with Standard wire cut and Kanawha brick, about 46,000 sq. yds., at $16,345; to MARQUIS & WALLACE, for paving Laidley St. with Standard wire cut brick, 2,475 sq. yds., at $4,001; this contract amounts to 2,475 yards. W. A. Hogue is City Engr.

SAVANNAH, GA.—Bids will be received until Feb. 15 by Harry Willink, Dir. Pub. Wks., for furnishing and delivering 3,000 sq. yds. of granite paving blocks f. o. b. Savannah.

PALATKA, FLA.—River, Third, Fifth, Laurel and other streets will be paved by the city with cement or gravel.

OXFORD, MISS.—Bids are asked until March 1 by the city for laying 144,400 sq. ft. of concrete pavement and 7,460 sq. ft. macadam streets. R. S. Adams is Mayor.

TOLEDO, OHIO.—Bids will be received until noon, Feb. 9, by the Board of Public Service, Reynold Voit, Secy., for furnishing material and repaving with either sheet asphalt, bitulithic, creosoted wood blocks or asphalt blocks a portion of Euclid Ave., improving a portion of Robinwood Ave. by paving with sheet asphalt, bitulithic or asphaltic concrete and a portion of Collingwood Ave. with sheet asphalt.

YOUNGSTOWN, OHIO.—The lowest bid submitted on Jan. 25 to the Board of Public Service for paving Bryson St. and Park View Ave. with brick was that of Mullen & Caldwell, at $3,636. F. M. Lillie is City Engr.

CLEVELAND, OHIO.—Bids will be received by the Board of Commissioners of Cuyahoga County until 11 a. m., Feb. 17, for grading, draining and improving State road No. 6 from the Akins road to the south line of Royalton Township. A. B. Lea is County Surv. William F. Black is Clk. Bd.

BARNESVILLE, OHIO.—Bids are asked by S. B. Piper, Clk., Warren Township, Belmont County, until noon, Feb. 6, for furnishing upper and lower vein limestone and napping of the same, for repairs to the macadamized roads in Warren Township, stone to be delivered and napped on or before Nov. 1, 1909, napped not to exceed four ounces in weight.

INDIANAPOLIS, IND.—The Board of Public Works will soon ask for bids for the following street improvements: Holton Pl., brick; Georgia St., east of Noble St., brick; Sanborn St., brick; Jefferson Ave., asphalt, and for the construction of cement curb and sidewalks in portions of Ethel St., Alabama St. and for the construction of local sewers in first alley west of Arsenal Ave. and in the first alley east of Nelson St. Blaine H. Miller is City Engr.

WABASH, IND.—Bids are asked by the Commissioners of Wabash County until March 4 for the construction of the county line gravel road. J. P. Noftzger is County Audr.

JEFFERSONVILLE, IND.—THOMAS F. O'NEIL has received the contract for improving Sixth St., at $7,069.

INDIANAPOLIS, IND.—Contracts for paving have been awarded by the city as follows: Liberty St., to A. D. BOWEN; Missouri St. and Washington Ave., to J. W. ABBOTT, and Musingum St., to AMERICAN CONSTRUCTION CO., all of Indianapolis. Blaine H. Miller is City Engr.

CHICAGO, ILL.—We are officially advised that bids were received as follows by the South Park Commissioners, E. G. Shunrway, Secy., on Jan. 20 for about 35,000 sq. yds. of paving on Michigan Ave., between Twelfth and Jackson Sts., with (a) sheet asphalt, (b) creosoted wood block or (c) bituminous concrete: Metropolitan Engineering & Constructing Co., Scarritt Bldg., Kansas City, $68,800; B. M. Zadeck Co., $78,294; the Standard Paving Co., $84,425; R. F. Conway Co., $83,150; the Parker-Washington Co., $85,435; the Barber Asphalt Paving Co., $88,196; (b) John A. McGarry & Co., $103,537; the Parker-Washington Co., 348 Sheffield Ave., Chicago, $108,775; D. A. Thatcher, $118,100; Federal Improvement Co., $117,125; James A. Sackley, $118,284; (c) Metropolitan Engineering & Constructing Co., $62,700 (mineral rubber asphaltic concrete); M. H. McGovern Co., $70,922; the Parker-Washington Co., $84,025; Asphalt Block Pavement Co., $83,690 (molded blocks); B. M. Zadeck Co., $94,094 (bitulithic). Itemized bids are given under Contract Prices.

DAVENPORT, IOWA.—Contracts for paving were awarded as follows by the Board of Public Works on Jan. 19: 3,252 sq. yds. on Sylvan Ave. and 900 sq. yds. on Rushohne St. to McCARTHY IMPROVEMENT CO., of Davenport, at $1.73 and $1.85 per sq. yd., respectively; to INDEPENDENT CONSTRUCTION CO., for 5,247 sq. yds. with brick on Ripley St., at $1.68 per sq. yd.; to the HYDRAULIC CONCRETE CONSTRUCTION CO., for 1,540 sq. yds. with brick on Warren St., at $1.64 per sq. yd.

ST. PAUL, MINN.—The Board of Public Works on Jan. 25 awarded contracts to KEOUGH BROS. for grading Adrian St., from Elway to Hathaway St.; Elway St., Montreal to West Seventh Sts.; and Hathaway St., Adrian to West Seventh Sts., at $6,300. Engineer's estimate, $6,250.

MINNEAPOLIS, MINN.—Bids are asked until 7.30 p. m., Feb. 12, by the city for 40,000 sq. yds. of paving blocks, 40,000 sq. yds. of vitrified paving blocks, 2,000 cu. yds. of crushed granite, 2,000 lin. ft. of 5 x 20-in. granite curb, 2,000 lin. ft. of sandstone curb, 150,000 sq. yds. of creosoted blocks. Andrew Rinker is City Engr.

EMPORIA, KAN.—HASKINS & RAMSEY have been awarded the contract for 14,000 sq. yds. brick paving, 4-in. brick on 8-in. gravel, at $1.38 per sq. yd.; 500 cu. yds. earth excavation at 35 cts., and 7,000 lin. ft. concrete combined curb and gutter at 60 cts. Total, $25,000. Bids were opened on Jan. 18. Alva J. Smith is City Engr.

CODY, WYO.—DAVID LEWIS, Cowley, Wyo., has been awarded the contract, at $3,475, for constructing a road for the county.

NEVADA, MO.—About 30,000 sq. yds. of brick paving will be laid here. Estimated cost, about $50,000. S. T. Higgins is City Clk.

LITTLE ROCK, ARK.—E. N. Wiegel, of Little Rock, has secured contract for grading West Seventh St.

LAKE VILLAGE, ARK.—The city will lay about 13,000 sq. ft. of concrete sidewalk. Bids are asked until Feb. 20. Herman Carlton is Secy. Bd. Improvement, Dist. No. 7.

SEATTLE, WASH.—Bids were received as follows on Jan. 22 by the Board of Public Works for asphalt paving on Washington St. and other streets: Independent Asphalt Paving Co., Third and Cherry Sts., Seattle, $141,844; Rich-Harris Construction Co., Bailey Bldg., Seattle, $143,508; F. McLellan & Co., Burke Block, Seattle, $132,341; Sparger Concrete Co., Colman Block, Seattle, $137,640; Hans Pederson, Alaska Bldg., Seattle, $141,281; P. T. McHugh, 1207 Queen Anne Ave., Seattle, $133,220; Barber Asphalt Paving Co., Mutual Life Bldg., Seattle, $128,523. R. H. Thomson is City Engr.

R. H. Thomson, City Engr., has reported the estimated cost of the following local improvements: Grading North and East 57th St. and other streets, $30,400; Whitman Ave. and other streets, $57,600; Newport Ave. and other streets, $18,500; Victoria St. and other streets, $4,970; Fourth Ave. and other streets, $6,550; Ravenna Boulevard and other streets, $11,600; 15th Ave., N. E., and other streets, asphalt paving, $13,975; Alley Block 15, Boren & Denny's Addition, same, $3,500; Federal Ave. and other streets, same, $15,200; North 834 St., concrete walks, $4,000; Broad St. and other streets, $7,380; 22d Ave. and other streets, $28,000.

LOS ANGELES, CAL.—Bids will be received by S. J. Lord, City Clk., about April 1 for the construction of about 70,000 sq. yds. of pavement. The road will be a tamped, oiled road, with three inches of rock and top coat of screenings. A. B. Waddingham, 310 Tajo Bldg., Los Angeles, is Engr.

PASADENA, CAL.—Bids will be received until Feb. 9 by the city for paving Dayton St. with a broken stone base, rock screenings and liquid asphaltum wearing surface, having a total depth of seven inches, cement gutter.

SAN LEANDRO, CAL.—PETER H. HOARE on Jan. 13 was awarded the contract by the Talcott Land Co., of Fruitvale, Cal., for macadamizing all the streets in the tract recently purchased by the company, at $50,000.

UPLAND, CAL.—Bids are asked by the Board of Trustees until 7 p. m., Feb. 15, for the construction of approximately 3½ miles of macadam pavement, 18 ft. wide, bordered on each side by oil tamped pavement six ft. in width; 3½ miles of cobblestone gutter, seven ft. in width; also 20 concrete arched bridge culverts, 25 ft. in length. R. C. Norton is City Clk.

WINCHESTER, ONT.—Bids are asked until 8 p. m., Feb. 5 by J. F. Cass Reeve, Winchester, for the construction of 18,200 sq. ft. of concrete sidewalks. Thomas H. Dunn is Engr.

WINNIPEG, MAN.—The following work will be done by the city this year: Granolithic sidewalks, $77,000; plank walks, $32,000; asphalt pavements, $49,000; block pavements, $56,000; sewers, $210,000, and water-mains, $87,000. H. N. Ruttan is City Engr.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

NEW BEDFORD, MASS.—The Pierce Mfg. Co., of this city has plans for a new weaving mill, 150 x 165 ft., one story in height. The mill will cost about $50,000. The Pierce plant now consists of two mills; the capital is $600,000. The equipment consists of 116,008 spindles and 3,164 looms, and employs 1,200 hands. The new mill will increase the number of looms over 500.

NEW HAVEN, CONN.—Andrew G. Smith, of New Haven, has had plans drawn for a 4-story manufacturing building. The structure will be of brick, 40 x 75 ft.

HARTFORD, CONN.—The Williams Bros. Mfg. Co., of Glastonbury, makers of silverware, is having plans drawn for an additional factory building. The structure will be three stories high, of brick, 40 x 140 ft.

FAIRPORT, N. Y.—The Sanitary Can Co. will build a 3-story and basement box factory, 35 x 170 ft., at once, of concrete and brick. Cost, $20,000. Plans have been prepared by the company's engineer, who will superintendent construction. Frank Longley is Supt.

MEDINA, N. Y.—S. A. Cook & Co. are having plans prepared for a furniture factory which they will erect on East Ave. in the spring.

JAMESTOWN, N. Y.—The Ashworth & Odell Worsted Co. is having plans prepared for a worsted mill which it will erect on a site at Crescent St. and the Erie R. R.

BUFFALO, N. Y.—The Iron Elevator & Transfer Co. will erect a 3-story brick grain-dryer house, at Abbot Road and the Lake Shore R. R. Cost, $6,[illegible]

The Jacob Dold Packing Co., [illegible] William St., will add to its plant at [illegible] Fillmore Av., and the New [illegible] Central R. R., a 3-story brick bu[illegible] to be equipped for salting and [illegible] rooms. Cost, $20,000. Edward F. Dold [illegible]

BURLINGTON, N. J.—We [illegible] officially advised that the Neidich Proc[illegible] A. Neidich, Pres., Burlington, [illegible] plates making enlargements and imp[illegible] its plant. A 2-story reinfo[illegible] concrete building with basement, 64 x 64 [illegible] to be erected in the spring. F. A. [illegible] 37 Wall St., New York, has been [illegible] Arch. and Engr.

FRANKFORD (Philadelphia [illegible]), PA.—Julius A. Gebauer has had [illegible] prepared from which he proposes [illegible] factory and power-house in Fran[illegible] $50,000.

WARREN, PA.—A corporation [illegible] ital of $500,000 has been formed [illegible] operate a grape juice factory [illegible] building will cost $150,000. R. J. [illegible] is interested.

MAYFIELD, PA.—The Alfred [illegible] Co. will erect a silk throwing mill [illegible] field. It will be 42 x 81 ft., of [illegible] construction and two stories high. [illegible] call for an expenditure of $7,500.

CORRY, PA.—It is stated that [illegible] Brake Shoe Co. has purchased the [illegible] property and will build a factory [illegible] and foundry at once.

BROWNSVILLE, PA.—Capt. Harr[illegible] has awarded the contract for the si[illegible] two shafts on an acreage of coal land [illegible] by him a short distance south of [illegible] to the DRAVO CONTRACTING CO., [illegible] Block, Pittsburg. He has also awa[illegible] same concern the contract for the [illegible] tion of the initial coking plant of 2[illegible] Work on the shafts for the mines [illegible] started at once, and the work on the [illegible] will be started in the early spring. [illegible] total cost of the improvement will be [illegible] $250,000.

TARENTUM, PA.—The McKELVEY [illegible] CO., 248 Fourth Ave., Pittsburg, has [illegible] awarded the contract for all grading, [illegible] dation work and concrete work at the [illegible] which the West Penn Steel Co., of Pitts[illegible] burg, Pa., is erecting here at what is known as Brackenridge. Steel, such as is used in the manufacture of electrical construction, steel furniture, fireproofing, automobiles and special sheet metal products will be manufactured. The plant will consist of an [illegible] ton open hearth basic furnace; one 3-high 28-in. bar mill with soaking pits and full mechanical equipment which will be engine driven; three sheet mills, equipped complete with two stands of cold rolls and individual engine; complete central steam and electric power generating plant; carpenter shop, blacksmith shop, machine shop, locomotive house, track scales and laboratory. The cost of the plant complete will be about $500,000. Joel W. Burdick, of Albany, N. Y., is Pres. of the company, and John R. McGinley, of Pittsburg, is Vice-Pres. and Gen. Mgr. The plant will cover 13 acres, and is to be completed and ready to place in operation next summer.

NEWHAVEN, PA.—The M. & W. Brazing Co., of this town, has been incorporated under the laws of Delaware with an authorized capital stock issue of $100,000 by A. G. Myers, Albert Hooper and Joseph Whitaker, all of Newhaven, and will operate a plant for brazing steel and all other metals.

MONESSEN, PA.—The pattern shops at the plant of the Pittsburg Steel Co., of Pittsburg, have been destroyed by fire, with all contents, consisting of machinery and patterns. The company will replace the shops with a fireproof building at once. The operation of the plant will not be interfered with in any way.

CONCORD, N. C.—Capt. J. M. Odell, of Concord, N. C., will establish a plant for the production of cotton yarns. He has awarded contract to R. A. BROWN'S SONS, of Concord, for the construction of the necessary building. This will be a 60 x 100-ft. structure, one story with basement. It will be equipped with spindles.

ZEBULON, N. C.—The Southern Spinning & Mfg. Co., of Zebulon, N. C., has organized with the following officers: Pres. and Engr.-in-Charge, Archibald Meldrum; Vice-Pres., Z. M. Caveness; Treas., T. J. Horton. The company has been incorporated with a capital stock of $300,000. The company will build a mill of 5,000 spindles for the production of cotton yarns for hosiery, besides a special fabric. Steam power will be used. The company expects to complete all arrangements soon.

BRYSON CITY, N. C.—A pulp mill, to cost $4,000,000, is to be built near Bryson City, by Whitney & Son, of Philadelphia, Pa. A band saw that will cut 200,000 ft. daily is to be operated by the company. About 2,500 men will be employed.

DAYTON, OHIO.—A 2-story brick factory will be erected on Edgar St. by the Muhlenberg Machine Co. A permit for the building has been issued by the Mayor.

TOLEDO, OHIO.—The Toledo Packing Co. has been incorporated with a capital of $400,000. The incorporators are F. J. Reynolds, Pres. of the First National Bank; J. C. Reinhart, N. W. Rassell, Rathbun Fuller and Paul J. Regan. The proposed plant will have a capacity of 2,000 hogs and 500 head of cattle a day.

SHIRLEY, IND.—A company, headed by C. L. Gemmen, has been organized to build and operate a plant for the manufacture of metallic railroad ties.

INDIANAPOLIS, IND.—The C. B. Cones Mfg. Co., Century Bldg., will receive bids for the construction of a factory on North Senate Ave. as soon as plans are completed. L. E. Patrick is Gen. Mgr.

The Adams Veneering Co. announces that it will build a lumber and veneering plant on the site of the plant recently destroyed by fire.

GARY, IND.—The Gary Pure Ice & Supply Co. has been incorportaed to build an ice plant and supply house. John J. McLaughlin, Joseph Mitchell and W. C. Crollins are Dirs.

DETROIT, MICH.—The Timken Roller Bearing Axle Co., of Canton, Ohio, will establish a plant here, it is stated.

WAHPETON, N. DAK.—The Commercial Club of Wahpeton desires to secure the location at Wahpeton of manufactories of felt goods, pianos and doors and sash, for which exceptional facilities are offered. Hydro electric power will be available in the town. F. R. Barnes is Secy.

ST. LOUIS, MO.—The Marx & Jones Associate Decorators, Inc., 3407 Olive St., has been formed with a capital of $50,000. The incorporators are Theodore Marx, Harvey L. Jones and Emile Johnson. The company succeeds the firm of Marx & Jones. Plans are under consideration by the concern for erection of a building which will cost about $100,000. Its location probably will be on Olive St., west of Grand Ave. It is to be a 3-story structure of brick and stone and fireproof.

CARLISLE, ARK.—The Carlisle Rice Mill Co., which was incorporated a short time ago, has purchased a site for the $50,000 mill to be erected at Carlisle. The plant is to have a capacity of 100 bbls. per day, and will draw its supply from the Carlisle territory, and which it is estimated will produce 250,000 bushels this season. The capital stock of the company is $100,000, of which $60,000 has been paid.

BELLINGHAM, WASH.—We are officially advised that the Larson Lumber Co., of Bellingham, Wash., has ordered from the MINNEAPOLIS STEEL & MACHINERY CO., of Minneapolis, Minn., a 22 × 42-in. Twin City Corliss engine. This engine will develop about 500 HP. It will have a flywheel 14 ft. in diameter, which will be grooved for twenty-four 1½-in. ropes. The machinery for the main drive has been ordered from the same company.

SANTA BARBARA, CAL.—The Southern Pacific Co. is making preparations to build machine shops and a round-house in Santa Barbara, to cost about $100,000. Stone, brick and cement will be used in the construction. The round-house will accommodate 30 engines, and the machine shops will be equipped with the machinery necessary for locomotive repair and constructive work. H. J. Small, San Francisco, Cal., is Gen. Supt. of Motive Power.

DRYDEN, ONT.—The Gordon Pulp & Paper Co. has let a contract to the STEBBINS ENGINEERING & MFG. CO., of Watertown, N. J., for entire equipment of machinery and apparatus required for a 40-ton sulphite plant in course of construction. The company has at this point on the Wabigoon River, a water-power and mill site, where 5,000 HP. will be developed under a head of 46 ft. Samuel Nesbitt, Brighton, Ont., is Pres. of the Gordon Pulp & Power Co., and Charles B. Gordon, Secy. and Gen. Mgr.

WINNIPEG, MAN.—The management of the Manitoba Iron Works is planning an addition to the buildings on Logan Ave. by the construction of an extension, 450 × 130 ft., at an initial cost of over $150,000. T. R. Deacon, Mgr. of the company, states that when the addition is completed the capacity of the work will be at least 20,000 tons of steel a year.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—Items regarding irrigation, canal projects, etc., will be found under Water Supply—Irrigation.

ENGINE.—Washington, D. C.—Bids are asked until noon, Feb. 10 by the District Commissioners for rebuilding one second size Clapp and Jones engine for the Fire Department, D. C.

PILES.—Superior, Wis.—Bids will be received until Feb. 15 by Lieut.-Col. Graham D. Fitch, Corps Engrs., U. S. A., Duluth, Minn., for furnishing and delivering piles at Superior Entry, Wis.

FIRE-ALARM SYSTEM.—South Sharon, Pa.—It is proposed to install an electric fire-alarm system here which will cost approximately $20,000. The matter will be decided at an election to be held this month.

DRY-DOCK.—Toledo, O.—A. BENTLEY & SONS, 37 North Huron St., Toledo, have secured contract to build concrete dry dock for the Toledo Shipbuilding Co., C. B. Calder, Gen. Mgr. Estimated cost, $200,000.

LEVEE.—Alexandria, La.—The Red River Atchafalaya & Bayou Boeuff Board has awarded contract to L. M. SULLIVAN to rebuild the levee in front of B. T. Lewis' plantation on Red River, near this city. About 33,000 cu. yds. at 11.93 cts. per cu. yd.

GRAND STAND.—Ottawa, Ont.—Bids are asked by the Central Canada Exhibition Association, 26 Sparks St., Ottawa, until noon, Feb. 12, for the construction and erection of a reinforced concrete grand stand on the Ottawa fair grounds. E. McMahon, Secy.

REPAIRING STEAMER.—San Francisco, Cal.—Bids for extensive repairs to the hull of the Norwegian steamer Henrik Ibsen were received by Consul-General Henry Lund and the contract was awarded to the MOORE & SCOTT IRON WORKS, of San Francisco, at $7,200.

PIER.—San Francisco, Cal.—Bids will be received until Feb. 25 by Board of State Harbor Commissioners, Union Depot and Ferry House, San Francisco, W. B. Thorpe, Secy., for furnishing material and constructing pier No. 34, on the water front. Ralph Barker, Asst. State Engr.

CEMETERY.—Detroit, Mich.—Bids were received by A. J. Haarer, Corm. Dept. Pub. Works, Detroit, on Jan. 11 for furnishing 20,000 bbbls. of Portland cement. Contract has been awarded to the MICHIGAN BUILDERS' SUPPLY CO., Detroit, for Wyandotte cement, at 92.7 cts. per bbl.

CEMENT.—Minneapolis, Minn.—Bids are asked by the Board of Public Works until 7.30 p. m., Feb. 12, for furnishing 40,000 bbls. Portland cement for street work; and 10,000 bbls. Portland cement and 5,000 bbls. natural cement for sewer work. Andrew Rinker is City Engr.; H. M. Knott is City Clerk.

DITCH.—Lake Charles, La.—Bids were received on Jan. 9 for the construction of a drainage ditch about two miles long, 30 ft. wide, in Iowa Drainage District; about 75,000 cu. yds. excavation. Estimated cost, $20,000. Contract has been let to WILKINS DREDGE CO., Jennings, La. T. H. Mandell, of Lake Charles, is Engr.

CHANNEL.—San Francisco, Cal.—The State Engineer has awarded contract for running the new channel in San Rafael Creek to WELLS, O'BRIEN & CO., as follows: for building the bulkhead, $2.75 a lin. ft.; for dredging the creek, 10 cts. a cu. yd. The proposed channel will be 4,000 ft. long, from the mouth of San Rafael Creek to San Francisco Bay.

TUNNEL.—Tacoma, Wash.—The Union Pacific R. R. Co. has awarded the contract for construction of a tunnel under the city of Tacoma to ARVID RYDESTROM and H. S. HUSON, of Tacoma. The contract calls for the construction of a tunnel under the business section of Tacoma, 8,647 ft. long, and the cost is approximately $1,000,000. A. L. Mohler, Omaha, Neb., is Gen. Mgr.; Russell L. Huntley, Omaha, is Ch. Engr.

MONUMENT.—Alton, Ill.—Bids are asked until noon, Feb. 15, by the War Department, Office of the Commissioner for Marking Graves of Confederate Dead, Washington, D. C., for furnishing and erecting complete, including foundation, in the Confederate section of the Confederate Cemetery at North Alton, Alton, Ill., a monument or marker to the Confederate prisoners of war buried therein, to be either of crystalline marble or of granite.

REPAIRING PIER.—Philadelphia, Pa.—Bids were received as follows on Jan. 25 by John C. Grady, Dir. Dept. of Wharves, Docks and Ferries, for furnishing material and making repairs to the Chestnut St. pier and clearing the site for same: American Paving & Construction Co., $27,850; Philadelphia Construction Co., $27,900; W. S. P. Shields, $31,500; Franklin Eyre & Son, $36,795; Armstrong & Latta Co., $44,448; Henhoeffer & Vaughan, $48,900; Jas. Doak & Co., $49,892.

METAL WORK.—Wilmington, Del.—Bids were received as follows on Feb. 1 by the Engineer, Fourth Light-House District, Wilmington, for superstructure of Miah Maul Shoal light-station, Delaware Bay: The Richard Manufacturing Co., Bloomsburg, Pa., $10,536 (recommended for acceptance); Pusey & Jones Co., Wilmington, $11,300; The Champion Iron Co., Canton, Ohio, $12,125; Lynchburg Foundry Co., Lynchburg, Va., $14,500; Atlanta Machine Works, Atlanta, Ga., $16,850; Glamorgan Pipe & Foundry Co., Lynchburg, Va., $26,200.

CANAL.—Houston, Tex.—The Cane & Rice Belt Irrigating Co. has awarded the contract for widening and lengthening the main canal, to provide water for 15,000 acres of land to BRAMER & BROWN and W. S. DELANEY. The cost of the work is $15,000. The capital stock of the company was increased recently from $100,000 to $300,000. J. M. Frost is Pres.; L. P. Scarborough, Vice-Pres.; Ben Campbell, Secy. and Treas., and Dr. J. W. Collier, of Beaumont, Tex., and W. D. Wing of Bangor, Me., are members of the Bd. of Dirs.

FIRE-ALARM SYSTEM.—Butler, Pa.—Bids are asked by H. E. Coulter, Boro. Secy., until 8 p. m., Feb. 9, for furnishing all material and labor and installing complete a fire-alarm system, approximately as follows: 40 positive non-interfering successive fire-alarm signal boxes; one six-circuit automatic storage battery outfit with controlling board and all appurtenances complete; one six-circuit positive non-interfering automatic repeater; one steam whistle blowing machine or a bell striker; one 12-in. electro-mechanical gong with visual indicator; two 8-in. electric mechanical gongs with visual indicators; one transmitting box with 90 character wheels; one gong for fire chief's residence, and 14 miles of line wire No. 10 B. & S. hard drawn three-braid insulated copper.

WIRELESS STATION.—Washington, D. C.—Bids were received as follows on Jan. 28 by the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., for the construction of a wireless station at Washington, D. C., and the equipment of the vessels of the Navy with wireless apparatus: National Electric Signaling Co., Pittsburg, $182,600, $108,900; Marconi Wireless Telegraph Co. of America, New York, $303,530, $242,295, $287,186, $308,469, $361,004; Massey Wireless Telegraph Co., Providence, R. I., $300,000; Radio Telephone Co., New York, $52,950, for installations of apparatus only, not for construction of towers; Stone Telephone & Telegraph Co., Boston, $100, $125,000, $250,000, $275,000; Telefunken Wireless Telegraph Co., Philadelphia, $168,450; Collins Wireless Telephone Co., Newark, N. J., $2,450 (incomplete).

CEMENT.—Chicago, Ill.—On Jan. 18 the Secretary of the Interior received bids for furnishing 70,000 bbls. of Portland cement for use in connection with the various irrigation projects of the Reclamation Service. The bids were opened at the office of the Reclamation Service, 777 Federal Bldg., Chicago, Ill., and were as follows: Ash Grove Lime & Portland Cement Co., Kansas City, Mo., f. o. b. Chanute, Kan., 80 cts.; Colorado Portland Cement Co., Denver, Colo., f. o. b. Portland, Colo., for Colorado, $1.18; for Idaho, 94 cts.; for Montana, 91 cts.; for New Mexico, $1.03; for North Platte Project, $1.13; for Shoshone Project, 96 cts.; for Utah, $1.06; Iola Portland Cement Co., Dallas, Tex., f. o. b. Iola, Kan., 80 cts.; Peninsular Portland Cement Co., Jackson, Mich., f. o. b. Cement City, Mich., $1.22 (20,000 bbls.); Pacific Portland Cement Co., San Francisco, f. o. b. Tolenas, Cal., $1.40; Union Portland Cement Co., Ogden, Utah, f. o. b. Devil's Slide, Utah, for Idaho and Nevada, $1.30; for Utah and Wyoming, $1.10; Universal Portland Cement Co., Chicago, Ill., f. o. b. Chicago, Ill., or Buffington, Ind., 95 cts.; United Kansas Portland Cement Co., Iola, Kan., f. o. b. Gas or Independence, Kan., 80 cts.; Western Portland Cement Co., Milwaukee, Wis., f. o. b. Belle Fourche, S. Dak., $2.18; Western States Portland Cement Co., Independence, Kan., f. o. b. Independence, 80 cts.

U. S. POSSESSIONS.

TIES.—Panama.—The following supplemental bids were received at the office of the Assistant Purchasing Officer, Isthmian Canal Commission, San Francisco, Cal., at 7.30 a. m., Jan. 26, in addition to those received at the same time at the office of the General Purchasing Officer, Washington, at the same time, on 200,000 cross ties, cypress, redwood or Douglas fir: W. R. Grace & Co., 614 California St., San Francisco, $182,000, Douglas fir; $232,000, redwood; 160 days. Charles Nelson Co., $214,200, redwood, 150 days. The delivery in each of these cases is La Boca, on those received at Washington, Colon.

ENGINEERING SUPPLIES.—Panama.—Bids were received as follows on Feb. 1 at the office of the Isthmian Canal Commission, Washington, D. C., for furnishing a quantity of manila rope for use on the Isthmus: Jos. N. Early, 127 Reade St., New York, $17,638; Manhattan Supply Co., New York (part), $7,847; Plymouth Cordage Co., North Plymouth, Mass., $16,402; Stauffer, Eshleman Co., New Orleans, $18,912; Wall Rope Works, 36 South St., New York, $15,147; White, Van Glahn & Co., 37 Barclay St., New York (part), $6,165; American Mfg. Co., 65 Wall St., New York, $13,058.

CONTRACT PRICES.

ASPHALT PAVING, ETC.—Seattle, Wash.—Following are the bids in detail, received on Jan. 22 by the Board of Public Works, for asphalt paving, etc., on Washington St., submitted by (A) Independent Asphalt Paving Co., Third and Cherry Sts., Seattle; (B) Rich-Harris Construction Co., Bailey Bldg., Seattle; (C) F. McLellan & Co., Burke Block, Seattle; (D) Sparker Concrete Co., Colman Block, Seattle; (E) Hans Pederson, Alaska Bldg., Seattle,; (F) P. T. McHugh, 1207 Queen Anne Ave., Seattle; (G) Barber Asphalt Paving Co., Mutual Life Bldg., Seattle:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Fixed Estimate	$3,500.00	$3,500.00	$3,500.00	$3,500.00	$3,500.00	$3,500.00	$3,500.00
Clearing and grubbing (lump sum)	1,500.00	1,000.00	3,000.00	650.00	1,000.00	1,000.00	1,300.00
12,350 cu. yds. earthwork	.60	.60	.40	.50	.70	.50	.55
8 catch basins, single inlet	60.00	65.00	60.00	70.00	70.00	60.00	70.00
1 catch basins, rebuilt	25.00	40.00	40.00	50.00	50.00	50.00	45.00
2 catch basins readjusted	15.00	25.00	5.00	20.00	10.00	2.00	20.00
12 catch basins removed	25.00	25.00	30.00	20.00	30.00	25.00	40.00
57 inlets to be moved	5.00	7.00	7.00	5.00	6.00	3.00	5.00
1,361 lin. ft. granite curbing, curved	1.85	1.85	1.90	1.90	1.95	2.00	2.00
84 lin. ft. granite curbing, curved, reset	.35	.35	.34	.35	.40	.40	.35
18,616 lin. ft. curbing concrete, straight	.40	.40	.50	1.30	.60	.40	.50
180 sq. yds. concrete sidewalk repairing	1.25	1.35	1.20	1.20	1.30	1.25	.50
16,556 sq. yds. asphalt paving	1.85	1.90	1.85	1.90	1.92	1.85	1.82
8,910 sq. yds. granite block paving	4.20	4.25	3.90	4.10	3.95	3.75	4.07
8,227 sq. yds. sandstone block paving	4.00	4.00	3.60	3.75	3.75	3.50	3.75
3,371 sq. yds. brick gutters	2.85	3.00	2.55	2.80	2.85	2.75	2.75
27 M. ft. B. M. old lumber, relaid	5.00	6.00	5.00	5.00	4.00	8.00	5.00
1 M. ft. B. M. wood gutters repaired	5.00	10.00	5.00	5.00	20.00	10.00	25.00
126 sq. yds. brick alley crossings	2.85	3.00	2.55	2.90	2.85	2.75	2.50
78 sq. yds. concrete alley crossings	1.35	1.35	1.20	1.50	1.30	1.35	1.50
370 lin. ft. wood stop	.50	.50	.60	.40	1.30	.40	.45
16 monument cases	8.00	10.00	10.00	8.00	10.00	10.00	7.50
13 existing inlets to be adjusted	3.00	3.00	5.00	5.00	3.00	3.00	.50
64 manhole and catch basin covers, adjusted	2.00	2.50	1.50	2.00	3.00	2.00	2.50
80 lin. ft. 8-in. pipe sewer	2.00	2.00	1.00	2.00	1.50	1.35	1.75
4,700 lin. ft. 6-in. side connections	1.25	1.25	.90	1.25	1.40	1.35	1.50
6 hydrants	85.00	90.00	80.00	75.00	80.00	100.00	75.00
11 brick gate chambers	35.00	30.00	60.00	40.00	35.00	35.00	35.00
4 cast iron valve boxes	7.50	15.00	5.00	5.00	10.00	5.00	6.50
6 8 × 8 × 6 tees plugged	8.00	15.00	15.00	20.00	8.00	11.04	15.50
60 lin. ft. 6-in. c.-i. pipe hyd. covers, Class "A"	1.20	1.50	1.00	1.50	1.25	2.00	1.25
2,000 lbs. special castings	.06	.07	.05	.05	.06	.08	.06
200 lin. ft. ¾ galvanized iron pipe hyd. drain	.60	.75	.15	.35	.20	.25	.40
Total	$141,844	$143,508	$132,341	$137,641	$141,281	$133,220	$138,533

ENGINEERING MATERIAL PRICES.

TRACK FASTENINGS—

Pittsburg, f. o. b. cars—Angle bars, 1.65 to 1.75 cts.; spikes, standard sizes, 4½ × 9-16-in., at 1.70 cts. and smaller sizes at 1.80 cts. in carload and larger lots, with an advance of 5 cts. per 100 lbs. for less than carload, f. o. b. Pittsburg; bolts, square nuts, 2.65 to 2.75 cts.; hexagonal nuts, 2.80 to 2.90 cts.

RAILS, STEEL—

New York—at mill—New standard sections, $28; standard, second quality, $27 to $28; light sections, 12 to 14 lbs., $34 to $36; Per gross ton—Heavy melting steel scrap, $13 to $13.50; old steel rails, rerolling lengths, $15 to $15.50; relaying rails, $23 to $24; old iron rails, $18 to $18.50.

Pittsburg—Standard sections, at mill, $28; standard, second quality, $27 to $28; light rails, 25 to 45-lb. sections, $25; 20-lb., $26; 16-lb., $27; 12-lb., $28.

STRUCTURAL MATERIALS—

Pittsburg, f. o. b. mill—Beams and channels, 3 to 15-in., inclusive, 1.00 cts., net; I-beams over 15-in., 1.70 cts., net; angles, 3 to 6-in., inclusive, ¼-in. and up, 1.60 cts., net; angles, over 6 ins., 1.70 cts., net; angles, 3 × 3 ins. and up, less than ¼-in., 1.50 cts., base, half extras, steel bar card; tees, 3-in. and up, 1.65 cts., net; zees, 3-in. and up, 1.60 cts., net; angles, channels and tees under 3-in., 1.50 cts., base, half extras, steel bar card; deck beams and bulb angles, 1.90 cts., net; hand rail tees, 3 cts., net; checkered and corrugated plates, 3 cts., net.

Chicago—at mill—Beams and channels, 3 to 15-in., inclusive, 1.78 cts.; angles, 3 to 6-in., ¼-in. and heavier, 1.78 cts.; angles larger than 6-in., 1.88 cts.; beams, larger than 6-in., 1.88 cts.; beams, larger than 15-in., 1.88 cts.; zees, 3-in. and over, 1.78 cts.; tees, 3-in. and over, 1.83 cts.

New York—at tidewater—Beams, channels, angles and zees, 1.76 cts.; tees, 1.81 cts.; on beams, 18 to 24-in., and angles over 6-in., the extra is 0.10 cts.

PLATES AND SHEETS—

New York—at tidewater—Standard-sized plates—Sheared plates, 1.76 cts. to 1.86 cts.; flange plates, 1.86 cts. to 1.96 cts.; marine plates, 2.16 cts. to 2.26 cts.; fire box plates, 2.65 cts. to 3.50 cts., according to specifications.

Pittsburg—mill shipment—Tank plates, ¼-in. thick, 6½ ins. up to 100 ins. wide, 1.60 cts., base; blue annealed sheets, No. 10 and heavier, 1.80 cts.; Nos. 11 and 12, 1.85 cts.; Nos. 13 and 14, 1.90 cts.; Nos. 15 and 16, 2 cts. Box annealed, Nos. 17 to 21, 2.25 cts.; Nos. 22 to 24, 2.30 cts.; Nos. 25 and 26, 2.35 cts.; No. 27, 2.40 cts.; No. 28, 2.50 cts.; No. 29, 2.60 cts.; No. 30, 2.70 cts.; galvanized sheets, Nos. 10 and 11, 2.45 cts.; Nos. 12 and 14, 2.55 cts.; Nos. 15 and 16, 2.65 cts.; Nos. 17 to 21, 2.80 cts.; Nos. 22 and 24, 2.95 cts.; Nos. 25 and 26, 3.15 cts.; No. 27, 3.35 cts.; No. 28, 3.55 cts.; No. 29, 3.70 cts.; No. 30, 3.95 cts.

IRON—

Pig Iron:

At New York—tidewater—	
Northern—	
No. 1 foundry	$17.00 to $17.50
No. 2 foundry	16.75 to 17.25
No. 2 plain	16.25 to 16.75
Gray forge	15.50 to 16.75
Basic	16.75 to 17.00
Virginia—	
No. 1 foundry	17.10 to 18.15
No. 2 foundry	16.65 to 17.00
Basic	16.60 to 17.10
Southern—	
No. 1 foundry	17.50 to 17.75
No. 2 foundry	17.25 to 17.50
No. 3 foundry	16.75 to 17.25
No. 4 foundry	16.25 to 16.50
No. 1 soft	17.25 to 17.50
No. 2 soft	17.25 to 17.50
Gray forge	15.75 to 16.25
Mottled	15.50 to 16.00
At Chicago—f. o. b.—	
Lake Superior charcoal	$19.50 to $20.00
Northern—	
Coke foundry, No. 1	17.85 to 18.35
Coke foundry, No. 2	17.35 to 17.85
Coke foundry, No. 3	16.85 to 17.35
Scotch, No. 1	18.35 to 18.85

Southern—		
Coke, No. 1	17.85 to	18.35
Coke, No. 2	17.35 to	17.85
Coke, No. 3	16.85 to	17.35
Coke, No. 4	16.35 to	16.85
Coke, No. 1, soft	17.85 to	18.35
Coke, No. 2, soft	17.35 to	17.85
Gray forge	15.85 to	16.35
Mottled	15.60 to	16.10
Malleable Bessemer	17.35 to	17.85
Standard Bessemer	17.90 to	18.40
Jackson County and—		
Kentucky Silvery, 6%	19.90 to	20.40
Kentucky Silvery, 8%	20.90 to	21.40
Kentucky Silvery, 10%	22.90 to	23.40
At Philadelphia—		
Eastern Pennsylvania—		
No. 2 X Foundry	$17.25 to	$17.50
No. 2 Plain	16.75 to	17.00
Virginia—		
No. 2 X foundry	17.25 to	17.50
No. 2 Plain	17.00 to	17.25
Gray forge	15.75 to	16.00
Basic	16.50 to	17.00
Low Phosphorus	21.00 to	21.50
At Pittsburg—		
Prices all f. o. b. Pittsburg—		
No. 2 foundry	$15.40 to	$15.50
Gray forge	....	14.50
Bessemer iron	16.90 to	17.15
Ferromanganese	45.90 to	46.40
Ferrosilicon	62.25 to	62.50

Cast-iron Pipe:

New York—Carload lots, net tons, 6-in., at tidewater, $24.

Chicago—4-in. water pipe, $27; 6-in. to 12-in., $26; over 16-in., $25, with $1 extra for gas pipe.

MISCELLANEOUS MATERIALS—

Copper:

Lake, 13.75 to 14 cts.; electrolytic, 13.25 to 13.50 cts.; casting, 13.12½ to 13.37½ cts.

Lead: New York, spot, 4.12½ to 4.17½ cts.

Spelter: New York, spot, 5.02½ to 5.07½ cts.

Tin: New York, spot, 27.15 to 27.35 cts.

CIVIL SERVICE EXAMINATIONS.

EXAMINER.—Oregon, Washington.—The U. S. Civil Service Commission announces an examination on Feb. 24-25, at Klamath Falls, Ore., and North Yakima, Wash., to secure eligibles from which to make certification to fill vacancies in the position of Examiner, at $1,800 a year and upward, and Assistant Examiner at salaries ranging from $1,200 to $1,600 a year, in the Reclamation Service, and vacancies requiring similar qualifications as they may occur in that service. Age limit, 20 to 40 years. Application Form 1312.

CHEMICAL BIOLOGIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on March 3, to make certification to fill two vacancies in the position of Chemical Biologist in the Department of Agriculture, at salaries ranging from $1,500 to $2,250 a year, and vacancies requiring similar qualifications as they may occur. Competitors will not be assembled for any of the tests. Age limit, 20 years. Application Form 304 and special form. Applications must be filed prior to closing hour on March 3.

TIMBER CRUISER AND PRACTICAL MINER.—Washington, D. C.—The U. S. Civil Service Commission announces examinations on March 17, to secure eligibles from which to make certification to fill about ten vacancies in each of the positions of Timber Cruiser and Practical Miner under the Chief of the Field Divisions of the General Land Office, at $7 a day each, and vacancies requiring similar qualifications as they may occur. Age limit, 20 years. Application Form 1093.

AID IN ZOOLOGY.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on March 17-18, to secure eligibles from which to make certification to fill a vacancy in the position of Aid (male), Department of Biology, National Museum, Washington, D. C., at $60 a month, and vacancies requiring similar qualifications as they may occur in that museum. Age limit, 20 years. Application Form 1312 and special form.

SUPERINTENDENT OF HIGHWAYS ENGINEER.—Albany, N. Y.—The State Civil Service Commission will hold examinations on Feb. 27, for the following positions: County Superintendent of Highways, in various counties, Resident Engineer, State Water Supply Commission, $2,400 a year. The last day for filing applications for these positions is Feb. 20. Full information and application forms for any of these examinations can be obtained by postal card request to the Chief Examiner of the Commission at Albany.

INDUSTRIAL NOTES.

THE AMERICAN LOCOMOTIVE CO. has purchased a plot of 130 acres of land at Gary, Indiana, from the Gary Land Company, a subsidiary company of the United States Steel Corporation and plans are being drawn for a new plant which officers of the Locomotive Company say will be the most complete and best equipped locomotive works in the world. The land purchased is twice the extent of that occupied by the largest of its present plants and when fully occupied will give employment to from 12,000 to 15,000 workmen. The land adjoins that of the new plant of the United States Steel Corporation. This site was selected at Gary, 24 miles from Chicago, to provide for the territory, where the largest number of railroads converge to a single commercial center. The Chicago district is a great railroad center and that district is rapidly developing in manufacturing importance, which renders it favorable as a location for securing material for building locomotives. This company now operates plants in Schenectady and Dunkirk, N. Y.; Pittsburg and Scranton, Pa.; Richmond, Va.; Paterson, N. J.; Manchester, N. H., and Montreal, Can. At present there is no large locomotive plant west of Pittsburg, and the selection of a location in the Chicago district provides additional locomotive building capacity where it is most needed for prompt and direct delivery to a large number of railroads. The size of the new plant will be sufficient to provide liberally for the growing needs of the railroads for years to come.

TRADE PUBLICATIONS.

RUST-PROOF PAINT.—The Good Paint Co., 225 Dearborn St., Chicago. Paper; circular; 6½ × 3½ ins.

The "Carbonail" paints are said to prevent rust and to ensure preservation of metal or wood surfaces coated with them.

EXPANSION JOINTS.—Albergen Condenser Co., 95 Liberty St., New York City. Catalog 11. Paper; 6 × 9 ins.

The Wainwright expansion joint, with corrugated main and slip tubes is well described here as are its fittings and hangers.

HOT BLAST HEATER.—Green Fuel Economizer Co., Matteawan, N. Y. Bulletin 118. Paper; 3½ × 5½ ins.; pp. 16; illustrated.

Claims are set forth briefly in this booklet for a hot-blast heater made up of straight tubes expanded into vertical headers.

ELECTRICAL CONDUIT.—G. M. Gest, 227 Broadway, New York City. Paper; 6 × 8½ ins.; pp. 58; illustrated.

In this attractive booklet the contractor's particular methods of laying conduit for all kinds of electrical circuits are briefly touched upon, but are pictured in some 80 reproductions of photographs of work in all parts of America.

SMALL ELECTRIC MOTORS.—Eck Dynamo and Motor Co., Belleville, N. J. Bulletins 39 and 40. Paper; 5 × 8 ins.; pp. 32; illustrated.

Protected and fully inclosed direct-current motors and generators, of ¼ to 20 HP., are cataloged here. With each bulletin are several sheets of miscellaneous data on the selection and installation of machines for certain services.

WATERPROOFING FOR CEMENT.—Portland Cement Waterproofing Process, 1225 Spruce St., St. Louis, Mo. Paper; 8½ × 10½ ins.; pp. 16; illustrated.

This pamphlet consists of a report of an investigation of this process. Results of tests are given, but there is no description of the process itself or of the materials used. The process is designed for use at cement mills, the waterproofed cement being delivered to their customers ready for use.

CONCRETE SPECIALTIES.—J. J. Harrell, 224 South Clark St., Chicago, Ill. Paper; four circulars; pp. 4 (each); illustrated.

These circulars relate respectively to (1) vehicle wheels of concrete; (2) molding machines for concrete pipes, posts, barrels, etc.; (3) tubular concrete poles and fence posts; (4) a machine for casting concrete articles in molds, depositing the concrete in vacuum and subjecting it to a high pneumatic or hydraulic pressure.

SEWAGE DISPOSAL APPARATUS.—Merritt & Co., 1024 Ridge Ave., Philadelphia, Pa. Paper; 6 × 9 ins.; pp. 28; illustrated.

A general review is given of methods of sewage disposal by septic treatment and intermittent filtration, and there is a list of recent literature on sewage treatment. The company's apparatus for sewage disposal plants includes the "Aerlock" sewage ejectors and automatic siphons, automatic sluiceways for periodically emptying the filters, and a sewage lift which uses water as its motive power. The pamphlet is accompanied by circulars describing the apparatus.

ENGINEERING INSTRUMENTS.—Bausch & Lomb Optical Co., Rochester, N. Y. Paper; 8 × 10½ ins.; pp. 67; illustrated.

This pamphlet gives a brief history of the company, and contains illustrated descriptions of a number of ordinary and special instruments, together with the Saegmuller patent solar attachments for transits. Among the special instruments are a mining transit with prismatic side telescope, a theodolite used in government and magnetic surveys, and light transits for architectural work. Dumpy, Y and precise levels are included. Also plane tables, the Verschoyle pocket transit, and different styles of leveling rods. Prices are given.

PUMPING AND AIR-COMPRESSING MACHINERY.—The National Steam Pump Co., Upper Sandusky, Ohio. Paper; 6 × 9 ins.; pp. 128; illustrated.

Pumps for boiler feed and general purposes are shown in considerable variety, and there are also sinking pumps, deep well pumps, wet vacuum pumps and oil pipe-line pumps. The air compressors are of the horizontal type, and a special form of centrifugal governor for compressors is included. The machines are illustrated by line engravings of sectional drawings and by half-tone engravings. There are also lists of dimensions and capacities, and some pages of useful information relative to friction of water in pipes, pump discharge, flow of air, etc.

INDUSTRIAL AND PORTABLE RAILWAYS AND EQUIPMENT.—Arthur Koppel Co., Machesney Bldg., Pittsburg, Pa. Catalogs No. 227 and 400. Paper; 6 × 9 ins. and 8¼ × 11 ins.; pp. 24 and 55; both illustrated.

Catalog No. 224 presents a number of views showing the applications of portable railways in construction work. Industrial tracks for manufacturing plants are likewise shown, together with outline drawings of several types of dump cars, accompanied by tables of dimensions and capacities. Koppel portable track is made in sections from rails of 8 to 25 lbs. to the yard, capable of carrying 2 to 7 tons. These rails are attached by clips to rolled steel ties, and the rail joints are so constructed that sections may be connected and automatically fastened by merely placing the ends of the rails in position.

The general catalog, No. 400, covers a great variety of narrow gage track and equipment. It has two main divisions dealing respectively with track and cars. Complete track equipment is shown for industrial, portable and permanent narrow gage railways, including cast plate track for indoor work. The cars described include several types of dump cars, platform cars, box cars, mine and logging cars.

SURFACE CONDENSERS AND COOLING TOWERS.—Wheeler Condenser & Engineering Co., Cartaret, N. J. Bulletins 102 and 104. Paper; 8 × 10½ ins.; pp. (each) 23; both illustrated.

Bulletin 102 deals with Wheeler and Wheeler-Volz surface condensers. In the latter type, a feed water heater is combined with the condenser. The illustrations include views of complete condenser installations and sectional views of separate condensers, including a type mounted over combined air and circulating pump driven by a common steam cylinder. Practical suggestions are given for the operation of Wheeler condensers and the general features of their construction are explained.

Methods of cooling water for steam condensing and other plants are described in Bulletin 104. After explaining the physics of water cooling, the different types of cooling towers are discussed, with a description of the Wheeler-Barnard tower, the essential feature of which is the use of a galvanized, woven-wire mat as the "filling" medium over which the water trickles. This tower is built on the forced draft, natural draft and open styles, and the numerous full-page illustrations adequately show its construction and manner of installation. There are also various tables on humidity, air and vapor mixtures.

For other Proposal Advertisements see pages 43, 44, of Advertisements and Construction News page 42.

SEWER.

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY. Incorporated.

Sealed proposals for the construction of a sewer known as the Twelfth Street Sewer Contract No. 25 of the Comprehensive System of Sewerage for the City of Louisville, Ky., will be received at the office of the Commissioners of Sewerage until 12 o'clock noon, February 26th, 1909.

The work will consist mainly of building a reinforced concrete sewer about 3,900 feet long, from 16 ft. to 27 ft. deep, and including about 3,350 cu. yds. of concrete, and 320,000 lbs. of steel.

Plans and specifications may be seen at the office of the Commissioners and at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon St., Boston, Mass.

Sealed bids should be endorsed "Proposals for the Twelfth St. Sewer" and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent (7%) of the total amount of the bid or a "Bidder's Bond" as described in the form of proposal.

W. C. NONES, Chairman.

CHAS. P. WEAVER, Secy. and Treas.

J. B. F. BREED, Chief Engineer.

U. S. ENGINEER OFFICE, Savannah, Ga., February 4, 1909.—Sealed proposals for raising and repairing dikes and training walls in Savannah Harbor, Ga., will be received at this office until 12 noon (Eastern Standard Time) March 5, 1909, and then publicly opened. Information on application. DAN'L KINGMAN, Col., Engineers.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., February 26, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M. on the day of March, 1909, and then opened, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. Post Office at Elizabeth, N. J., in accordance with drawings and specifications, copies of which may be obtained from the Custodian at site at Elizabeth, N. J., or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

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